

## MIND

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OF

PSYCHOLOGY AND PHILOSOPHY

## I.—PLATO'S CONSCIOUSNESS OF FALLACY.

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WHEN we read an argument in Plato's dialogues, our first impression is often that it is absurdly fallacious. Especially is this so in the early dialogues. The question therefore arises whether these arguments seemed as fallacious to Plato as they do to us, or whether he thought them valid. And this leads on to the further question what conception Plato had of fallacy as such? To what extent did he possess words for fallacy in general, or for special forms of it; to what extent had he a logical apparatus for dealing with it? This article (1) briefly surveys the types of fallacy in the early dialogues, and (2) attempts to answer the two questions thus raised.

Four sorts of fallacy are common in Plato's early dialogues: (1) fallacious question, (2) fallacious analogy, (3) fallacious conversion, and (4) ambiguity.

(1) A *question* is fallacious if it implies a falsehood. Every question implies a proposition. This is because a question expresses wonder, and wonder must be about something. It is impossible to wonder about nothing at all. In wondering we are therefore assuming the existence of some state of affairs, or the truth of some proposition. A question is fallacious, therefore, when the proposition which it implies is false.

Fallacious question in this sense is frequent in the dialogues. When, for example, Socrates asks what part of reality rhetoric concerns (*Go.* 449D), he is assuming, as the context shows, that

there must be some part of reality that is dealt with by rhetoric and by no other science, if rhetoric is to be a science. The question of the *Lysis*, under what conditions friendship arises, assumes that there are universal and necessary conditions of friendship, and that they are very simple, perhaps so simple as to be expressed in a single word. Fallacious question is common in Plato's early dialogues in the form of offering an inexhaustive set of alternatives: "Is A X or Y?", where the truth is that it is neither. Such a question can be made especially plausible by a fallacious use of the law of excluded middle. If Socrates asks us whether A is X or not-X we feel that it must be one or the other; and yet the question whether justice itself is just or unjust is probably fallacious (*Prot.* 330C; see Theodore de Laguna, *Philos. Review*, XLIII, 450 ff.). Socrates often succeeds in getting a universal proposition accepted by representing that the only alternative is the contrary ("Is A X or not-X?"), when the truth is that "Some A is X and some is not" (e.g. *Go.* 507A7-9, *Alc.* I, 126C).

(2) The nature of fallacious *analogy* need not be elaborated here, nor need we emphasise its apparent frequency in Plato. On a first reading of the *Gorgias*, for example, we may think it wholly unfair to compare Pericles, whom the Athenians convicted of theft towards the end of his career, to a keeper whose animals should be worse tempered at the end of his charge than at the beginning (516A). Socrates' common analogy between virtue and art or τέχνη seems responsible for many fallacies.

(3) Fallacious *conversion* is assuming that all B is A when the premise was only that all A is B. In the categorical syllogism it appears as the undistributed middle or as the illicit process. For if from all A's being B and all C's being B we infer that all C is A, it is because we have assumed that, since all A is B, all B is A; and if from all A's being B and no C's being A we infer that no C is B, it is again because we have assumed that, since all A is B, all B is A. In the hypothetical syllogism fallacious conversion is known as "affirming the consequent". "If X is A it is B; X is B; therefore X is A." We have assumed that "if X is A it is B" entails its converse "if X is B it is A". Examples of this fallacy in Plato will be better postponed to a later occasion.

(4) The nature of *ambiguity*, and its frequency in the dialogues, are sufficiently evident for our preliminary purpose. Every reader of the *Lysis* feels that the word φίλον there means sometimes lover and sometimes beloved, and that much of the argument turns on this equivocation. In the *Protagoras* (332)

Socrates infers that wisdom and temperance are identical from these three premises: (1) wisdom is opposite to *aphrosyne*; (2) temperance is opposite to *aphrosyne*; (3) nothing has more than one opposite. Here *aphrosyne* means folly in the first premise but intemperance in the second.

In spite of the fallacious appearance of their arguments to us, Plato's characters often show a very high degree of confidence that their arguments are neither fallacious nor merely probable. "Either we must abandon those doctrines or these conclusions must follow", says Socrates in the *Gorgias* (480E); and elsewhere in the same dialogue he refers to his arguments as "iron and adamant" (509A).

We come now to the first of our two questions: To what extent did Plato himself consider such arguments fallacious?

When the conclusion of an argument is false, this may be either because the inference is fallacious or because the premises are false; and in philosophy it is hard to say which. In geometry perhaps we can always certainly distinguish between a false premise and a fallacious inference; but the geometrical method has never worked in philosophy. The subject-matter is too fluid or too elastic, the distinction between axiom and theorem extremely hard to maintain. In philosophy, therefore, there is always danger of mistaking a false premise for a fallacious inference; and that is what we are doing much of the time that we find fallacy in Plato.

There is a specially good reason why we should make this mistake with Plato, and that is that we often do not at first see what his premises are. To take an example, the analogy between art and virtue shocks us only because we do not think what it really means. "Art" is our translation of *τέχνη*, and *τέχνη* to Plato is identical with *ἐπιστήμη* or knowledge. "Virtue" is our translation of *ἀρετή*, and *ἀρετή* to Plato and Socrates is essentially a form of knowledge. The premise is, then, that *ἀρετή* and *τέχνη* are both knowledge; and there is no fallacy in treating them as analogous. Plato is merely saying that what is true of all forms of knowledge must be true of *ἀρετή*, since *ἀρετή* is a form of knowledge. What happens in this case is that because of the difficulty of thinking ourselves into Plato's strange world, and of remaining in it in spite of the pull of our modern conceptions, we fall back on the modern equivalents for his conceptions, and unfortunately they are not equivalent! And this is the explanation of many of the fallacies that we think we find.

Three of the four types of fallacy we have enumerated are

perhaps more properly to be regarded as forms of falsity in the premises. (1) Fallacious question is a way of obtaining a premise. (2) All analogy is premise before it is inference. (3) When we think we find fallacious conversion in Plato, the truth is often that he assumes the convertibility of the proposition as part of the premise. Thus in *Republic*, I, 341C-342E, which looks like an illicit process of the minor term, Socrates is probably really premising the equivalence of the minor and middle terms. He is taking for granted that all τέχνη is ἀρχή and all ἀρχή is τέχνη, which very likely seemed a probable premise to him. Even in English, when we say that Aness is Bness, using abstract nouns without a sign of quantity, we think of the proposition as asserting an equivalence, and therefore convertible. Much more must this be so in Greek, whose far greater inflectedness makes word-order far less important, so that "A is B" and "B is A" tend to become identical when both are nouns, or at any rate when both are abstract nouns. A curious passage in the *Gorgias* (466A) seems to imply that in Greek if you say "A is B" you will be understood to imply that B is A, and if you wish to avoid this implication you must say "A is a sort of B" or "A is a part of B". The translation is this: "What are you saying? Rhetoric seems to you to be flattery?—I said a part of flattery. Can you not remember at your age, Polus? What will you do next?" The same thing seems to be implied, though less distinctly, by this passage from the *Meno* (73E): "Justice is virtue, Socrates.—Is it virtue, Meno, or a virtue?—How do you mean?—Well, take anything you like. Take, say, roundness. I should say that roundness is a shape, not just simply shape. And the reason why I should say so is that there are other shapes." Here Socrates seems to imply that if you say that justice is virtue you imply that virtue is justice.

In this way we can remove many of the apparently fallacious questions and analogies and conversions in the dialogues. They are not really fallacious, and therefore the question whether Plato was aware of their invalidity would itself be a fallacious question when applied to them. Nevertheless, there certainly remain in the dialogues many fallacies falling under each of these three heads; and in addition to all of them there is the great army of fallacies in the dialogues falling under the head of ambiguity, none of which can be explained away as falsehood in the premises. The question is still legitimate, therefore, to what extent Plato was aware of the fallacies in his dialogues as fallacies.

The difficulty of this question is due to the nature of dialogue. The dialogue, being a form of drama, enables the author to set



down opinions and arguments without expressing any judgment on their truth or validity. In fact, it makes it quite hard for him to indicate unmistakably what his judgement is. He may use a chorus or other recognised device to talk in his proper person; but Plato did not. To speak through the most prominent or the most sympathetic character is a much less certain means of communication; but it is the only one the dialogues employ. Its uncertainty has been well illustrated in the twentieth century by an enormous divergence of opinion on the question how far Plato does so speak. It thus comes about that for only a tiny fraction of the arguments he presents does Plato give us anything like a direct statement of his own view of their validity; and even in these cases the statement can only consist in a subsequent comment by one of the *dramatis personæ*.

It is necessary to divide the dialogues into two groups, and answer the question separately for each group. All Platonic scholars hold that in the *Sophist* and subsequent works the protagonist expresses Plato's own views, except that Professor Taylor would exclude the *Timæus* from this generalisation. In the earliest dialogues, on the other hand, Plato's purpose is almost entirely to depict an unusual personality, and he has little or no interest in defending the logical validity of any argument which that person uses; he cares only to show that the argument, when it was used, effectually convicted of ignorance the man upon whom it was used. It remains perfectly possible that this conviction of ignorance took place through premises that were in fact false, or through inferences that were in fact invalid. The earliest dialogues aim at depicting a person who aims, not at inculcating any positive truths, but at convicting men of ignorance in order to make them eager to seek virtue.

We can now answer the question separately for the two groups of dialogues that we have distinguished. In the latest dialogues, if the protagonist offers as a serious argument what is in fact a fallacy, then Plato himself failed to see the mistake. For example, if the explanation of the possibility of falsehood in the *Sophist* should seem to us a fallacy, we should be obliged to conclude that Plato here made a logical error.

In the earliest dialogues, on the other hand, there is no general reason for supposing that Plato was himself deceived by any fallacy by which he makes Socrates deceive another; and we ought to assume this, with regard to any particular fallacy, only if there is some special reason for doing so, as that this fallacy deceived all Athenians, or deceived Plato all his life. In the purely elenctic dialogues the fact that a fallacy passes for valid

is not by itself any evidence that Plato thought it was so. Elenchus is essentially argument *ad hominem*. As the questioner has to find premises that appeal to the answerer, so he has to find inferences that appeal to him; and, provided that he really does convince him, he may sometimes use premises that he does not himself believe, and even inferences that he himself considers fallacious. Certainly Plato might put into Socrates' mouth an argument that Plato believed fallacious, but Socrates had actually used and used successfully. Probably he might think it a typical piece of Socratic mischief to bewilder a fool or stimulate a boy with a fallacious argument. Shorey is right, in principle at any rate, in saying that Plato was not himself deceived by the fallacy he set down in the *Lysis* (220E), but deliberately chose to make the appearance of bewilderment and the antithesis between the prime beloved and other beloveds as complete, as emphatic, and as symmetrical as possible (*Class. Phil.* XXV (1930), 380-3). When an early dialogue ends with a review of the argument in which Socrates takes a low opinion of its value, that is Plato's way of telling us that he knows the arguments are dubious. At the end of *Republic*, I, Socrates says they have got nothing out of the discussion because they have failed to persevere with any one question until it was answered. At the end of the *Charmides* he notes that they have committed many deliberate inconsistencies. At the end of the *Lysis* he emphasises their helplessness in the search for the nature of friendship. At the end of the *Protagoras* he declares the argument to have been a terrible topsy-turvy confusion (361C).

So much for the question to what extent Plato was aware of the fallacies in the arguments he attributed to his characters. We turn now to our other question: What consciousness had Plato of fallacy as such?

On general grounds we must believe that Plato, during at any rate a large part of his creative years, was aware in some way of the general nature and possibility of fallacy. When the greatness of a great man expresses itself frequently in highly formalised and explicit chains of deduction, it stands to reason that the possibility of fallacy must occur to him in some shape. And we may assure ourselves that this actually happened by reading his *Euthydemus*, where he puts into the mouths of two sophists some twenty arguments which he obviously believes to be fallacies. The *Euthydemus* as a whole is a copious, vivid, concrete picture of fallacious reasoning; and Plato evidently means it to be such.

But the *Euthydemus* as a whole, just because it is so concrete, does not settle the question what *abstract* consciousness Plato

had of fallacy. It remains to be determined whether he had any word as abstract as the English word "fallacy", and whether he distinguished various kinds of fallacy. Let us therefore inquire first into his consciousness of the generic notion of fallacy as such, and then into his consciousness of each of our four kinds of fallacy in turn.

When we search for names or definitions of the generic notion of fallacy, we are led to the conclusion that Plato has no word or phrase that means "fallacy" as distinct from other forms of intellectual shortcoming. Such a phrase as *πάντα ὅσα διανοία σφαλόμεθα* (*Soph.* 229C) includes every failure to grasp reality, and does not distinguish fallacy from falsehood. Nearest to it come his words "alogon" and "eristical" and "antilogical" and "sophistical"; but each of these means some larger complex in which the notion of fallacy is only an element not yet abstracted from the rest. "Alogon" indicates the general notion of irrationality, including perverse behaviour. "Eristical" and "antilogical" are names for a whole type of philosophical or pseudo-philosophical behaviour, characterised especially by contentiousness and the tendency to contradict. "Sophistical" is a still larger complex of notions with a strongly personal flavour. Even Aristotle expresses the notion of fallacy only by unsatisfactory phrases such as "sophistical refutation", "it does not syllogise", and "there is no conclusion".

If we look for some passage discussing the notion of fallacy as such, so far as that can be done without the aid of a name, we are again disappointed. Plato's dialogues have not made the abstraction of fallacy as such. They have not gone farther than the concrete presentation of particular fallacies, as found especially in the *Euthydemus*. Let us turn to our four species of fallacy, and ascertain whether the process of abstraction has risen as far as them in the dialogues.

(1) The *Euthydemus* (300C) contains a *question* that Plato obviously knows to be fallacious, although he makes no comment thereon. "What, said Ctesippus, are not all things silent?—No, indeed, said Euthydemus.—Then all things are speaking, my dear man?—Those that are speaking.—That is not what I am asking, said he; I am asking you whether all things are speaking or silent?" In the *Gorgias* (503A) the answerer says "that is not a simple question". He does not mean that it is hard, but that the answer is "sometimes yes and sometimes no". Simplicity here means universality; a question is simple if we can answer it with a universal proposition, either affirmative or negative, but not simple if we have to descend to particulars and

distinguish them. Earlier in the same dialogue (466CD) the answerer declares that the questioner is asking two questions at once. These passages give the measure of the insight expressed in the dialogues into the fact of fallacious question. They do not amount to much. Even Aristotle recognises this fallacy only in a special case, which is not very representative of its essence. He calls it "making several questions into one" (*S.E.* 4, 166b27); and he never shows any realisation that there is no such thing as a single question in the sense of a question that makes no assumption. His partial and atypical insight is embodied in the usual names "complex question" or "many questions"; and so far as I know the earliest person to see further was Lotze. The dialogues are roughly in Aristotle's stage, except that they have no conventional name for the thing.

(2) There are many passages in which the answerer's reply to Socrates' question is what we might call the rejection of an *analogy*. "Some painters are better than others, presumably?—Certainly.—Now do the better ones produce finer works, that is, paintings? And in the same way do some architects make finer houses than others?—Yes.—Then is it also true that some lawgivers produce finer work than others?—No, I do not think so in this case" (*Cra.* 429AB). Very often the words used are that this is "not like" that. "I somehow feel, Socrates", says Meno, "that this is no longer like these others" (*Meno*, 73A). "As if this were like that" is the contemptuous phrase with which Thrasymachus accuses Socrates of a false analogy (*Rp.* I 337C). Once it is expressed by the proverb: "You are joining flax and not-flax" (*Euthyd.* 298C). The *Charmides* (165E) has: "You are not going about it in the right way, Socrates. This is not like the other forms of knowledge, nor are they like each other; but you are proceeding as if they were alike." But we find no name for the fallacy, and no discussion of the conditions that tend to make an analogy false or true. Nor, as I show in my *Plato's Earlier Dialectic*, do we find any very explicit discussion of analogy in general. Plato's word *ἀναλογία* always means something strictly mathematical to him.

(3) As to fallacious *conversion*, Socrates points out in the *Euthyphro* (12) that, whereas all that is holy is just, not all that is just is holy. He illustrates this by remarking that, whereas all that is revered is feared, not all that is feared is revered. The reason is, he says, that the fearful is wider than the reverend, that fear is a part of reverence. In this passage Plato grasps the notion of fallacious conversion to the extent that he can give

two concrete cases of it, and place them side by side so that by comparison we may feel the universal nature present in them both; but he has no general name for this universal nature.

Exactly the same stage of insight reappears in the *Protagoras* :

You asked me whether brave men are confident, and I admitted it. But whether confident men are also brave I was not asked, and if I had been I should have said that they are not all so. My admission was that brave men are confident, and you have done nothing to show that it was wrong. You point out that those who know have more confidence than those who do not, and you think that proves that bravery and knowledge are the same. You could prove in this way that strength is knowledge. You could ask me first whether strong men are powerful, and I should say yes. Then, whether those who know how to wrestle are more powerful than those who do not, and more powerful than they themselves were before they learned, and I should say yes. And when I had made these admissions it would be possible for you, using the same proof, to say that according to my admissions knowledge is strength. But I am not for a moment admitting that the powerful are strong, only that the strong are powerful. For power and strength are not identical. Power comes both from knowledge and from madness and anger, while strength comes from nature and from good care of bodies. Similarly, in the other argument, confidence and bravery are not identical. Whence it happens that, while brave men are confident, not all confident men are brave. For confidence comes to men both from skill and from anger and from madness, like power, whereas bravery comes from nature and good care of souls. (350-1.)

Here as in the *Euthyphro* we are given concrete insight into the nature of fallacious conversion by being invited to see the identity in two juxtaposed cases of it; but we are not given any name or definition of this identical element. There are no other passages that express as much consciousness of the thing as these two.

(4) That Plato was sometimes conscious of the fallacy of *ambiguous terms* is certain from the *Euthydemus*, where he first makes the brothers commit this fallacy in a crass form with the word *μανθάνειν*, and then makes Socrates explain at length that the argument works by taking this word in two senses. Moreover, Plato comes nearer to having a name for ambiguity than to having names for fallacious question and analogy; for in this

passage of the *Euthydemus* he calls it "the difference of words" (*τὴν τῶν ὀνομάτων διαφορὰν* 278B), and elsewhere he once has the word "amphibolous" (*Cra.* 437A). Only on these two occasions, however, does he almost give a name to ambiguity. He often uses the word "homonymous", but never in Aristotle's sense of a species of ambiguity.

This survey of Plato's consciousness of our four species of fallacy shows that it was very small. There is no discussion of fallacious question or analogy, only one passage discussing ambiguity, and only two discussing illegitimate conversion. The discussions of conversion juxtapose cases, but extract no name or definition. The only trace of names for any of the four are two names for ambiguity, each appearing once only.

We have now obtained a preliminary answer to our question what consciousness Plato had of fallacy. This answer is at present a mere sketch, very incomplete and yet at the same time too definite. It treats the problem too much as an affair of all or nothing. The assumption that Plato either was or was not aware of the notion of fallacy, and that there is no middle possibility between these two extremes, ought to be replaced by the assumption that a given man's awareness of any given conception can vary indefinitely in degree. There is no such thing as a complete grasp of an idea; and there is no such thing as a zero grasp of an idea; and between any two degrees in the grasp of a given idea are others. On this assumption the comparatively simple question whether So and So had realised such and such idea must be replaced by the much harder question to what degree he had realised it. We have no established scale for such degrees, and therefore our answer to such a question can only consist in a long and laborious accumulation, piling up descriptions of the stage of the idea in this thinker, and comparisons of it with other thinkers. In the rest of this article we shall attempt this process for one species of fallacy only, namely, ambiguity. The choice of this species is indicated both by its frequency in the dialogues, and by its importance in philosophy, and by the fact that, unlike our other three species, it cannot be explained away as a falsehood in the premise.

It is probable that all language is ambiguous, for it is probable that no statement whatever is or can possibly be accurate enough for all the purposes that may arise. In Whitehead's words, "any verbal form of statement which has been before the world for some time discloses ambiguities; and . . . often such ambiguities strike at the very heart of the meaning". But if all statements are ambiguous, much more so are all words; for a

word as such is vaguer than a statement as such, and gains definition on each occasion from the sentence in which it appears. And we must understand the word "ambiguous" to mean not merely meaning two things but meaning an indefinite number of things. All language is ambiguous, then, in the sense that every sentence and every word has an indefinite number of meanings; and the range of these meanings is usually much wider for words than for sentences.<sup>1</sup>

We have already noticed a reason for believing that Plato had some consciousness of ambiguity; but we now require some more special reasons indicating that he realised to some extent the peculiar subtlety and formidableness of this type of fallacy. The passage in the *Euthydemus* is no evidence for this; it is one of those crass ambiguities out of which puns are made.

In the first place, there is an argument from the general character of the early dialogues. Shorey remarked that the *Lysis* "reads precisely as if its philosophic purpose were to illustrate the mental confusion that arises when necessary and relevant distinctions are overlooked or not clearly brought out" (*What Plato Said*, 115). It is surely true that the great and salutary lesson the early dialogues have for us is ambiguity and again ambiguity—that our ordinary moral terms are profoundly ambiguous and confused. Is it possible to study these works philosophically without carrying away this conclusion, without deciding that we must not do what Socrates is always doing there, namely taking common terms into philosophy at their face value? If these works really drive home this important conclusion, is it not what Plato meant them to do? A book is a machine to think with, as I. A. Richards has said; and Plato's early dialogues are admirably designed to stimulate us into thinking.

In the second place, we may point to the discussion of *λόγος* at the end of the *Theætetus*, and urge that Plato is there distinguishing three senses of the word. *Λόγος*, he says, is either the reflection of thought in words (206D), or the recital of the elements of a thing (206E ff.), or the statement of a mark that distinguishes the thing from everything else (208C). The discussion is elaborate and self-conscious.

In the third place, we may appeal to the discussion of not-being in the *Sophist*. Shorey, for example, there finds Plato "explicitly distinguishing the copula from the substantive *is*"

<sup>1</sup> For a development of this thesis, and for a discussion of the general power of ambiguity and some of the forms in which it most troubles the philosopher, see my article in *MIND* for April, 1941.



(WPS, 298). Surely, we may say, the following passage is the detection of a subtle ambiguity in the verb "to be":

Let no one say that we are presuming to assert the being of not-being represented as the opposite of being. We have long ago said goodbye to the question whether there is any opposite of being or not, either explicable or completely inexplicable. But as to our present account of not-being, let a man either refute it and convince us that we are wrong, or, so long as he cannot, let him say as we do that the kinds mingle with each other; and that, since being and the other traverse all of them and each other, the other shares in being and *is* because of this sharing, while yet it *is not* that in which it shares, but, being other than being, is clearly necessarily not-being. (*Sophist* 258E-259A.)

And surely the following is the detection of a subtle ambiguity in the phrase "... is the same":—

We must overcome our distaste and admit that motion is both the same and not the same. For we are not speaking similarly when we call it the same and not the same, etc. (*Sophist*, 256A.)

Fourthly, we may appeal to the distinction drawn in the *Statesman* between a part and a kind or species or form. Plato there says (262-3) that it would be a mistake to divide animals into men and beasts, because "beast" is only a part of "animal" and not also a kind of animal. That this is a way of indicating that "beast" is an ambiguous word appears strongly from the following sentence: "You seemed to me to be merely subtracting a part, but to suppose that all that were left constituted a single kind because you could apply to each of them the same word 'beast'" (263C). Plato here clearly indicates his opinion that the fact that we apply the same word "beast" to each of a set of things is no guarantee that there is some "form" common and peculiar to this set. This amounts to a recantation of his earlier belief that we could safely posit a "form" wherever there was a common word (*Rp.* 596A). In other words, whereas in the middle dialogues the theory of "forms" included the naïve assumption that most words are univocal, Plato is now beyond that stage, and realises that we must do more than trust to language in order to discover "forms".

As a fifth and last argument, for the view that Plato appreciated the pervasiveness of ambiguity, we may remark that he had a pupil whose contribution to the study of ambiguity was



certainly the most original ever made, and is probably still the best. In at least four different ways Aristotle advanced this matter enormously. He persistently noted and analysed and listed the various meanings of important philosophical terms. We have a substantial collection of these analyses in *Metaphysics* Δ; and they enter intimately into the texture of all his ontology. In the second place, he introduced illuminating descriptions of the various kinds of ambiguity. Thirdly, he listed six forms of fallacy dependent on language; and all of these are in reality forms of ambiguity, as he implies when he says that they are the ways in which we mean different things by the same words and sentences (*SE*, 4, 166b29). The most important of them is the fallacy caused by what he calls the *σχήμα λέξεως* or grammatical form. He points out that we use one grammatical or syntactical device to express many different realities, and that we use more than one grammatical device to express a single reality. This concept of the absence of one-one correspondence between the grammatical structure and the object, even in true statements, leads directly to his greatest achievement of all in this sphere, the famous doctrine of the categories, which is the theory that being is an ambiguous word with ten different meanings. In this theory the pervasiveness of ambiguity is clearly suggested for the first time; for it means that the basic linguistic formula "X is Y" has a different meaning for every category to which X may belong. It is a great pity that Aristotle did not elaborate the concept of analogical ambiguity mentioned in the *Nicomachean Ethics*, I, 6. It is a great pity that he has not left us a full-dress treatise on ambiguity as such, something more general than *Metaphysics* Δ and the *Categories*, and something less bound up with questions of controversy than the *Sophistical Refutations*. But surely, it may be argued, what he has given us justifies us in believing that his teacher saw more of ambiguity than any punster must.

Such are the arguments that can be made in favour of the view that Plato appreciated the seriousness of ambiguity. Turning to those on the other side, we may begin by rejecting the argument (number one above) that Plato must have intended the early dialogues to enforce the lesson of ambiguity. Surely the degree of irony thus attributed to him is superhuman. Do these dialogues suggest important truths about ambiguity to more than a tenth of the people who read them? Did they to more than a tenth of the readers whom Plato expected? We may doubt whether many Greeks could have profited by them in this way until Aristotle had done his work. It is easier for us than

for them to see ambiguity in these dialogues, not only because we have Aristotle behind us, but also because we look at them from another language in which the ambiguities are different.

A second consideration strongly supporting the view that Plato was mostly unconscious of the subtler forms of ambiguity is stated in an article on ambiguity (MIND, L, 140-141), but had better be repeated here. In the typical procedure both of the early and of the middle dialogues there is a point where it is very important that the question of ambiguity should arise; and it never does. The typical procedure of the early dialogues is that Socrates puts a question of definition, the answerer misunderstands it and Socrates explains it, the answerer gives an answer, Socrates refutes it, the answerer gives another answer, Socrates refutes that, and so on. The question of ambiguity should arise before the question of definition. Before asking for the definition of X we should ask whether X always means the same; at least we should remember the possibility that X does not always mean the same during our search for its definition. In the *Meno* (74D) Socrates says to Meno: "Since you give the same name to each of this multitude of things", what is the one element that you find in all of them? He does not raise the apparently prior question whether we give the same name to each of the collection in the same sense. The essence of the Socratic search for definitions is the insistence that the word *must* somehow mean the same in all its uses, however various they at first sight appear.

In the middle dialogues the typical procedure is to find an Idea wherever there is a common name. It is clearly expressed in the *Republic*: "we are accustomed to assume that there is some one Idea related to each collection of things to which we give the same name" (596A). Evidently this is the same mistake in method as that with regard to definition in the early dialogues. We ought to bear in mind the possibility that the name is ambiguous; but the dialogues never do.

Against supposing Plato conscious of the subtleties of ambiguity we probably ought to put, thirdly, his contempt for those who seem to him to concern themselves with words instead of thoughts. Again and again he laughs at Prodicus for distinguishing closely related meanings; and one of these passages is specially interesting (*Euthd.* 277E) because it perhaps implies that Prodicus used to lay down the principle that you must learn about verbal correctness first, where first presumably means before you can learn about things. In the *Gorgias* he scorns what he calls word-hunting (489B and 490A). In the

*Cratylus* he lays it down that the study of words is not the way to a knowledge of things. In the *Euthydemus* Socrates says that, even if a man knew many ambiguities such as *μανθάνειν*, or all there are, he would be no nearer knowing the truth about reality. In *Republic*, I, the notion of strict speech is introduced by an unsympathetic character as a desperate defence of an unsympathetic doctrine. Plato seems to hold the opinion, common also today, that we should despise nicety in the use of words, or at any rate intellectual as opposed to aesthetic nicety; that the truly original and liberal thinker attends only to things. The unnoticed implication seems to be that the good thinker can think correctly whatever words he uses as his symbols; and that he can understand what you are communicating to him however haphazardly you use your words. Such an attitude surely involves serious misapprehensions about the nature of language and our dependence thereon. No one maintains it after he has seen the range and power of ambiguity; and its presence in Plato is therefore a sign that he had not. The force of this argument is, however, somewhat lessened by the fact that Plato's utterances about language include many of another sort. The passages about the folly or difficulty or even impossibility of writing philosophy down seems to express a despair about words very different from the careless confidence implied in the passages we have just been recalling. Can it be that he thought that on the one hand communication by the written word is so precarious as to be hopeless, but on the other hand communication by the spoken word is so sure that elaborate precautions are needless?

Against the argument from Aristotle (number five above) we may say that Aristotle seems to forget his doctrines of ambiguity when he comes to ethics, and ethics is Plato's preponderating subject. The *Nicomachean Ethics* does, it is true, begin by declaring that good is an ambiguous word; but this doctrine does not permeate the book as the ambiguity of being permeates the *Metaphysics*; on the contrary, it is impossible to see any respect in which the rest of the book would have been different if he had not laid down this doctrine at the beginning. On the word *ἀρετή*, which is much more important to the book than the word good, he casts almost no suspicion; and most remarkable of all is his uncritical attitude to the word *καλόν*. This word is essential to his account of right action, for it is frequently invoked as being what the really virtuous man really aims at. Yet it is never related to happiness or to contemplation, both of which are also said to be the end; and it is never examined or discussed as such in any way. If, then, even Aristotle, who has so many

and such good things to say on ambiguity, seems to forget the whole matter when he talks on ethics, we can perhaps easily believe that Plato did not have it in mind in his ethical dialogues. Throughout the history of philosophy ethics seems to have resisted the resolution of its terms much more than the other disciplines.

With regard to the second argument above, it is hard to say whether in the *Theatetus* Plato is distinguishing three meanings of the word *logos*, or three species of the genus *logos*, or three hypotheses as to what the one thing *logos* is. *Logos*, he says, may be the reflection of thought in speech (206D), or the recital of the elements of a thing (206E ff.), or the statement of a mark that distinguishes the thing from everything else (208C). In favour of supposing that he regarded this as a case of ambiguity we observe that it is hard to see how the first could be either a co-species or a rival hypothesis to the other two. We observe also certain phrases that make this way. "What does the word *logos* mean?" is surely the right translation of τί πότε βούλεται τὸν λόγον ἡμῖν σημαίνειν; (206C), especially in view of the strange accusative. And the next sentence seems to be: "For it seems to me to mean one of three things". Ἴσως γὰρ δλέγων οὐ τοῦτο ἔλεγεν (206E) probably means "The man who asserted this definition perhaps did not mean this". Thus Plato's language in introducing his first and second accounts of *logos* suggests that he thought he was dealing with an ambiguous word. On the other hand, what he says about his third account suggests rather that he thought he was dealing with rival hypotheses.

Perhaps someone will define it not thus, but as the remaining kind of the three, one of which, we said, will be laid down to be *logos* by him who defines knowledge as right opinion with *logos*.—You did right to remind us. Yes, there's one left. One was an image as it were of thought in speech. The other that we just mentioned was a path to the whole through the elements. And what is your third?—What most people would say; being able to name a mark by which the subject of inquiry differs from all things.

Here the phrase "what most people would say", and the verb *θήσεσθαι* or "lay down", with its close connection with *ὑποτίθεσθαι* or "hypothesize", suggest that Plato thinks he is dealing with rival theories about the nature of the one thing *logos*.

These conflicting appearances indicate the following view of the passage. Plato here is not clearly separating the discrimination of the senses of an ambiguous word from the discrimination of theories about the nature of a thing. He passes from the

former to the latter without realising it. His second and third accounts of logos are rival attempts to clarify the nature of some one thing vaguely felt; but his first account refers to another thing altogether. Therefore, in passing from his first to his second account he is passing from one to another sense of an ambiguous word; but in passing from the second to the third he is passing not to a third sense, but only to a second hypothesis about the thing meant by the second sense. If this is the right interpretation, the discussion of logos in the *Theatetus* is by no means a clear case of the detection of an ambiguity. It is an obscure detection of an ambiguity not distinguished from a perception of rival hypotheses.

The strongest of the arguments in favour of Plato's realising the ambiguity of language were the appeals to the *Sophist* and the *Statesman*; and to these let us now turn.

With regard to the *Sophist*, we note that at best Plato is here dealing only with one or two cases of ambiguity, namely "is not" and "is the same". The *Sophist* cannot by any stretch of the imagination be considered a discussion of ambiguity as such. It contains no word or phrase to which any dictionary would give the English equivalent "ambiguity", nor any other of the related set of semantic terms, such as "univocity" and "meaning". It does not even contain, in the passages to which the argument appeals, the word "word" or *ὄνομα*. Translators make Plato much more precise than he was, and much more of a semanticist, when they render *ὁμοίως* by "in the same sense", or *οὕτως* by "in this sense", or *ἐκείνη* by "the precise sense". (The examples are from Cornford's translation of *Soph.* 256A, 256E, 259D.)

The fact is that, however the *Sophist* may seem to us, it did not seem to Plato to be a discussion of words or syntax or anything verbal at all. It seemed to him to be about the "ideas" or "forms", which, far from being human words, are realities very remote from man and quite independent of him. What appears to us as the discovery of the copula, a piece of grammar or logic, appeared to Plato as the discovery of a certain "form", namely the Other, which has the wonderful property of "communicating" with all other "forms" without exception. In our language, he thought of his discussion of not-being as pure ontology, and not at all as semantics or logic. He is talking about Being, not the word "being"; about the Other, not the word "other"; about Forms or kinds, *εἶδη* or *γένη*, not about words or *ὀνόματα*. Hence Shorey and Taylor are mistaken in ascribing to him the discovery of the copula; and Cornford, although he denies this,

is equally mistaken in finding that Plato here distinguishes meanings of "is" and "is not".

Why is it, then, that so many interpreters find logical or grammatical doctrines in this part of the *Sophist*? The answer seems to be this. Suppose that I give you an account of Hans Pluke, describing at length his appearance, activities, relatives, and so on; suppose further that everything I say is true of one and the same existent individual, except that this individual's name is not Hans Pluke; suppose lastly that there never has been and never will be a man bearing the name of Hans Pluke. The three things thus supposed could jointly occur; they are each possible and together compossible. This is an analogy of Plato's procedure in the *Sophist*. He there gives us an account of what he calls the "form" of the Other; there is no such "form"; nevertheless, all that he says about it is true of something else, namely the word "other". Not provided with any semantic concepts, and misconceiving the ontological status of his subject-matter, Plato has yet contrived to get wonderfully near to certain facts about language. Using extremely inappropriate tools, he has yet produced such a recognisable result that we all instinctively restate it for him in the more suitable language now available.

If this is a true account, the *Sophist* is so to speak almost but not quite at the top of the ridge that looks down into the valley of ambiguity. It is much higher than Plato ever climbed before, for it leaves far below the discussion of λόγος in the *Theætetus*.

It is also higher than he ever reached again, with the possible exception of the passage from the *Statesman* put forward above as the fourth argument for the view that Plato saw the pervasiveness of ambiguity. This passage in the *Statesman* (262-3) is much less thorough and elaborate than that in the *Sophist*. Nevertheless, it comes nearer to formulating the idea of ambiguity as such. If Plato had confined himself to saying that a part is distinct from a "form", the passage would have been little to our purpose; but, when he interprets this doctrine as implying that the existence of the word *W* is not sufficient evidence of the existence of a "form" common and peculiar to all the things called *W*, we are strongly inclined to feel that, if only he had had at that moment some such word as ἀμφιβολία to provide a spark, a very bright flame would have been generated. As it is, however, the remarkable hint thrown out in this passage did not, so far as we know, lead to any revision of the theory of "forms"; and Plato appears to have remained till death at the point of view stated in the *Euthydemus*, that ambiguity is of no importance to the philosopher.

## II.—PLATO'S *PARMENIDES*.

BY ROBERT SCOON.

ONE significant result of the increasing agreement among scholars on the historical order in which Plato's dialogues were composed has been the tendency to regard each of them as the expression of some philosophical interest in the author's mind at the time of composition; and this tendency has on the whole been strengthened by many fresh and valuable studies of the later dialogues, which reveal attitudes to some degree new as compared with the earlier works. But the *Parmenides* is so extraordinarily difficult to interpret that it has not fitted well into any picture of Plato's intellectual development, and to a certain extent has been left as a kind of occasional piece by itself. Accordingly, I wish to explore the possibility of interpreting the dialogue as a documentary expression of Plato's state of mind at the time it was written.

It is generally conceded that it belongs to the same period as the *Theaetetus*, and that the latter must have been composed about 368, when Plato had been head of the Academy for twenty years. Since the *Theaetetus* discards the awkward device of reporting what somebody said that somebody else said, which is adopted in the *Parmenides* but not followed in subsequent dialogues, we may suppose that the *Parmenides* is the earlier of the two pieces. It would then form the first of the later group of dialogues, which were probably composed after a rather long interval from the *Republic* and the *Phaedrus*, during which Plato's energies were absorbed in teaching.

In order to avoid confusion, I shall refer to the historical philosopher after whom the dialogue is named as Parmenides, to the dialogue itself as the *Parmenides*, and to the *persona* of the dialogue as 'Parmenides'. So also with the historical Zeno, and the dialogue's character 'Zeno'. I shall summarize separately the two parts into which the work falls, and then try to interpret the whole.

### I

The first part of the discussion is a conversation between 'Zeno', Socrates, and 'Parmenides' on the subject of 'Zeno's'



attempt to disprove pluralism by showing that "if the things that exist are many, then they must be both like and unlike, and that is impossible, for the unlike cannot be like nor can the like be unlike" (127e 1). Socrates suggests that a distinction should be made between like objects and the form of likeness, between unlike objects and the form of unlikeness; you can then suppose that any objects participate in both forms and thus are partly like and partly unlike, but the forms themselves apparently cannot participate in one another without losing their identities. Such a position would of course tend to weaken 'Zeno's' argument by showing that there is a perfectly good sense in which you can say that certain things are both like and unlike. At this point, however, 'Parmenides' intervenes with an attack on the doctrine of forms, for the purpose of denying the validity of the distinction between objects and forms which Socrates had introduced against 'Zeno'.

(1) *Analysis*. 'Parmenides' first argument (130b 3-e 4) is as follows. He gets Socrates to admit forms of likeness, unity, plurality, and such things; then of justice, beauty, goodness, and "all such things". But when he asks whether there are forms of man, fire, and water, Socrates confesses that he has often been puzzled about them; and when 'Parmenides' goes on to hair, mud, filth, and the most valueless and paltry objects, Socrates first flatly denies forms of such things, which are just what we see them to be. But then he admits that he really does not know why, if the argument for forms holds in some cases, it should not hold in all; and in the end he confesses that he simply restricts his attention to the cases about which he is sure, for fear that he would get into a mess of nonsense if he brought in the others. 'Parmenides' tells him that he will get over this squeamishness when he grows older and more philosophical, and on this note the argument stops.

*Interpretation*. It is clear that this attack concerns the extension of the theory of forms; it does not question the relation of forms to particulars, but rather the kind of cases to which the theory is applicable. And the hub of 'Parmenides' position is that there are cases which Socrates will not admit for fear of spoiling the whole theory, which he is, however, bound to admit on the basis of the argument for the cases he does admit. The context suggests that the argument to which 'Parmenides' refers is that where there is a many with a common character, there is a class form—an argument which is obviously assumed in several early dialogues (e.g. *Euthyphro*, 6d 11, *Phaedrus*, 249b 6, *Republic*, 596a 6), and which is stated by 'Parmenides'



later in the present dialogue and accepted without hesitation by Socrates (132a 1-5). 'Parmenides' point then is that, if you accept this argument in some cases, you must accept it in all.

What we have to ask ourselves is why Socrates should ever hesitate to do this; and that question, from the point of view I am exploring, really means: what aspect of the theory of forms, as expounded in the earlier dialogues, would make it difficult for Socrates to accept the cases of ridiculous, filthy, and vile objects, which 'Parmenides' brings up against him. The answer I would suggest is: that side of the early theory which interpreted the form as a kind of ideal, which particulars try to reach but fall short of. In the *Phaedo*, for example, persons, sticks of wood, and other similar objects are said to 'desire' or 'wish' to be perfectly equal, but to 'fall short of' or 'be incapable of' or 'worse than' this complete equality (74a 6; d 6, 9; e 1; 75a 2; b1, cf. *Meno*, 72c 6-9); and these expressions, of course, are exactly those which are used of a person with an ideal, such as justice or holiness. If we accept Aristotle's testimony that Socrates busied himself with ethical questions, we can think of the young Plato, still under the spell of his master, but endowed with much more originality than he gave himself credit for, as so impressed with the reality of the qualities Socrates had stood for that he thought of them in the same category as the qualities of natural objects, and then assumed that these natural objects were related to their qualities as men were related to their ideals. There is no indication in the early dialogues that Plato distinguished moral qualities from the others, for he treats equality, similarity, unity, beauty, holiness, justice, and goodness all alike; and the unsystematic classification given in the passage of the *Parmenides* under discussion is the first hint of any differentiation.

Apparently the first questioning of this position arose, not with regard to negations such as the not-just, nor even with forms of evil like injustice, but in connexion with what is foul and petty. Socrates seems to suggest here in the *Parmenides* that it would subject the whole theory of forms to ridicule to suppose that every piece of filth falls short of pure and perfect filthiness, but is trying to be as filthy as possible under the limitations of sensuous existence. If you say that every thing is 'worse than' (*φαιλότερον*, *Phaedo*, 74e 2) some perfection, what are you going to say about the 'worst' things (*φαιλότατον*, *Parmenides*, 130c 7), which do not appear to be trying to reach perfection at all, and yet can hardly be supposed to aspire to imperfection? But the inclusion of hair in the list at which Socrates balks

suggests that there are natural classes which neither aim at anything beyond themselves nor fall short in any respect—they just are what the senses declare them to be.

Thus this first criticism of 'Parmenides' may be interpreted as bringing to light a difficulty in the early doctrine of forms, which had combined the idea of class with that of perfection or ideal. And the fact that Socrates in the dialogue frankly admits the difficulty and offers no defence may be an indication that Plato is questioning his former position. The final remark of 'Parmenides' that when Socrates gets more philosophical training, he will give up his attitude of disregard for things that are popularly considered petty and ridiculous, would suggest that in the future the theory of forms would be developed in the direction of a more scientific idea of class or species.

(2) *Analysis*. 'Parmenides' second argument (130e 4-133a 10) concerns the relation of a form to its particulars, and contains a number of distinct points, which may be differently organized; but the following analysis seems to me best on the whole.

(i) 'Parmenides' first (130e 4-131e 7) attacks the notion of participation according to which a form is said to be present in the particulars. He makes Socrates admit that either the whole form must be present in every particular or else only a part of the form is present in any particular; in the first case, the form will be multiplied, in the second case, divided. And in either case the unity of the form has vanished. There are also impossible paradoxes in the special case of the large, the equal, and the small.

(ii) The rest of the argument (131e 8-133a 10) is complicated, but it seems to turn on the conception of similitude between a form and its particulars. 'Parmenides' shows that if you argue for a form as an explanation of the common character in a group of objects, your logical principle gets you into an infinite regress; for as soon as you have a form, it and its particulars, *ex hypothesi*, have a common character, and you will need another form to explain that, and so on *ad infinitum*. When Socrates tries to avoid these consequences by the extraordinary suggestion that the form may be a thought "in our souls" (presumably this means that a single abstract thought can be an image of many separate but similar things), 'Parmenides' shows that a common character of things must be an object of thought, which has both a reality and a unity not constructed by the mere thinking of it; and therefore, if a form (e.g. equality) is a thought, all the particulars participating in it (e.g. sticks) will necessarily be thoughts, and then you will be forced to say

either that all these things think or else that they are unthinking thoughts. Without further ado Socrates gives up this line of defence and tries to take cover in the simple position that forms are patterns fixed in nature, particulars are likenesses of them, and participation is resemblance; but 'Parmenides' has no difficulty in showing that this is merely another way of describing the common character, which, as he previously proved, paves the way for an infinite regress. And there this second argument ends.

*Interpretation.* We must now ask, as we did under the first argument, what aspect of the earlier theory of forms could justify this attack; and we can put this question more concretely by asking why Socrates in the present passage has to submit to 'Parmenides' multiplying and dividing the forms, as if they were so many concrete objects. The answer I would suggest is: precisely because the forms had been conceived like concrete objects in the early dialogues. 'Parmenides' point that either the whole form or merely a part of it must be present in any particular is plausible only if the form is conceived as a thing to which the part-whole idea is applicable; and it is noteworthy that Socrates does not demur when 'Parmenides' asserts that participation must be either in wholes or in parts.

Now there are many passages in the early dialogues in which a discussion of forms is introduced by the question, "Do we say that justice (beauty, goodness, etc.) is something?" (e.g. *Phaedo*, 65d 4-8, 103c 11; *Protag.*, 330c 1, 358d 5; *Meno*, 76a 1). Another common way of talking about a form in the early dialogues is not by the abstract term 'justice' (*δικαιοσύνη*), but by the phrase 'the just by itself' (*τὸ δίκαιον αὐτό*); and this expression contains the suggestion that 'the just by itself' is to be understood in contrast to the just that is mixed up with other things in some sensible object. The just by itself is a thing which exists like other things, but it is unlike other things in being by itself, pure and unadulterated. From this point of view it is possible for Plato to say that this thing that is just by itself somehow gets into other things and makes them just. And he can also say not only that ordinary just things are 'like' that which is just by itself, but also that the just by itself is itself just (equality is equal, *Phaedo*, 74d 6; beauty is beautiful, *Phaedo*, 100c 4, 5; justice is just, holiness is holy, *Protag.*, 330c 4, 5, e 1).

Such expressions show how far Plato's early view was from a concept of qualities; and, moreover, they suggest that what he had in mind was frequently not a form at all, but a kind of thing.

The truth is that many of the passages which are usually taken as evidence for his theory of forms contain no mention of forms at all, and are best interpreted as expounding a doctrine of essences, or intelligible things, or real natures; and in other passages, such as *Republic*, X, 596, 597, "the bed which is really bed" seems to be interchangeable with "the form of beds".

Thus 'Parmenides' second argument in the passage under discussion may be understood as bringing out the inconsistency between this talk about things by themselves and the concept of form. If you argue for a form on the basis of a common character in certain things and then treat the form as another thing, (a) the question of whole or part can be raised with regard to the form-thing in its relation to the other things and cannot be satisfactorily answered, and (b) the concept of similarity can be applied to the form-thing and other things, so that you have a new form-thing, and ultimately an infinite regress. Neither of these consequences would follow unless the form were conceived as a thing; and the difficulty suggests that the theory as a whole should be developed in a less material and more metaphysical direction.

There is, however, an additional complication in the (b) part of this argument, involving the idea of similarity, which is extraordinarily difficult to interpret. The gist of it, I think, can be given fairly in this way: when Socrates suggests that participation is resemblance, 'Parmenides' argues that in that case the form must resemble the object in so far as the object resembles the form, and this statement lays the foundation for the infinite regress. The main difficulty concerns the translation of the Greek words for resemblance, for the words may mean either likeness in what we should call a symmetrical relationship, or an asymmetrical pattern-copy relation; and it seems clear that 'Parmenides' argument would be valid for the first rendering, but invalid for the second. On the evidence of this particular passage I do not find it possible to conclude definitely in favour of either interpretation; nor can I find references in earlier dialogues, which obviously involve the symmetrical relation, although there are passages in which objects are called resemblances of forms (e.g. *Phaedrus*, 250). Hence we must interpret the present passage by means of general considerations, and I submit the following. It will be recalled that at the beginning of the dialogue Socrates in his discussion with 'Zeno' introduced the form of likeness; now if equality is equal, beauty is beautiful, justice is just, etc., then likeness must be like. In that case would it not be difficult for Plato to escape from the

symmetrical relationship? Indeed, to the extent that Plato had in mind essences, such as the pure beautiful or the perfect equal, it seems to me likely that he assumed a symmetrical relation of resemblance between them and the particulars. From this point of view the argument of 'Parmenides' could be interpreted as a criticism of this conception of participation and forms, and a hint that the form should be conceived more clearly as an original and unique pattern.

(3) *Analysis*. 'Parmenides' third argument (133a 11-135b 4), which is described as the most damaging of all, concerns the separation of the forms. He first gets Socrates to admit that there are no forms "among us", that is, in the world of our ordinary experience, where nothing is pure "by itself"; and the implication of this position is plainly that the forms must exist in a realm of their own. Now 'Parmenides' takes the case of correlatives, like master and slave, and argues that, if there is a form of mastership, it must be correlative to the form of slavery. A particular master is correlated with the particular slave of whom he is the master; but mastership by itself is correlative with slavery by itself, and both belong to the realm of forms. 'Parmenides' then proceeds to apply this principle to the special case of knowledge. Knowledge by itself will be correlative with truth by itself, and each branch of this knowledge with a corresponding kind of being; but all *our* knowing is particular knowings, correlated with particular objects in our world, and since the forms are admittedly not in our world, it follows that we can never know them. It also follows that God, who presumably knows the forms, cannot know the contents of our world. Thus, as 'Parmenides' points out, we are led in the end to two realms which have no relation with one another; we are in one, and the forms in the other.

*Interpretation*. If now we ask, as before, what aspect of the early theory of forms could give rise to this criticism, we shall do well to start with the admission of Socrates in the present passage that any being which is pure by itself could not exist in our world (133c 6). It is clear that this statement refers to a position which contrasts the forms with concrete objects to such an extent that they seem to constitute two separate realms. The germ of this position may be recognized in those passages in the early dialogues, which stress the eternal purity and identity of the forms, together with the changeable and impure character of natural objects; and it appears more fully developed in the doctrine of two worlds, the visible and the intelligible, in the *Republic*. Furthermore, by the side of this doctrine there

is the view that the soul can apprehend the forms only to the extent that it is freed from the trammels of bodily circumstance ; and in spite of such suggestions as the philosophic practice of death in the *Phaedo*, the poetic ecstasy of the *Phaedrus*, and the doctrine of reminiscence, it would not be difficult for a critic to show that, putting religious enthusiasm aside, we cannot know the forms in any real sense in this life.

It is, I would suggest, these passages in the early dialogues, which allow 'Parmenides' in the present argument to make the bald assertion (133e 5) that the forms and the objects of our experience have no connexion with one another, and which seem to leave Socrates without any rejoinder. It is quite true that there are passages in these early dialogues which clearly assert that the soul uses sensations to reach forms (*Phaedo*, 75a 5-7, e 3, 76a 1, 2 ; *Phaedrus*, 249b 7, 8) ; and the position that forms are present in objects and make them what they appear obviously implies an organic relation between the two realms. But 'Parmenides' argument may be interpreted as bringing out the basic inconsistency between this view in which the forms rest firmly on the objects of our experience, and the other view in which they are opposed to and separated from these objects. His point is that if you insist on the conception of what is "separate by itself", it loses all connexion with experience and becomes absolutely unknowable.

## II

The second part of the dialogue (135b 5-end) opens with an admission by 'Parmenides' that if we are moved by all the difficulties just rehearsed to give up the whole theory of permanent forms, we shall be left without understanding of anything, and reasoning will become impossible. When Socrates agrees, but is unable to suggest how to keep the forms and avoid the difficulties, 'Parmenides' says that the whole trouble lies in the fact that Socrates has set up the forms without an adequate philosophical training, such as 'Zeno' has ; and the rest of the dialogue is taken up with an elaborate illustration of this 'method'. The 'method' turns out to be that of setting up any hypothesis, and then deducing consequences.

But 'Parmenides' makes two preliminary suggestions, which ultimately have great significance. The first purports to be merely a reiteration of an earlier observation of Socrates himself, that 'Zeno' might very easily prove any visible object to be both one and many, but it would be very surprising if he could

prove that oneness was the same as plurality. 'Parmenides' now takes this remark of Socrates as justification for ruling out all reference to experience and restricting his illustration to purely theoretical or *a priori* concepts.

His second suggestion is to the effect that the method of 'Zeno', when completely developed, will include the setting up of opposite hypotheses for the deductive process. The historical Zeno had merely taken the hypothesis of his opponents and shown that it led to contradictory or absurd conclusions; but 'Parmenides' now implies that the idea of contradiction can be extended from the process of deduction to the original hypothesis, and thus the perfected method will embrace the deduction of consequences from opposite starting points.

'Parmenides' then proceeds to illustrate the working of this perfected method, as applied to 'his own' concept of 'the one', in eight arguments. These may be schematized as follows:

A. If you simply assume 'one', all you can say is: 'one'. It cannot have parts, beginning, end, middle, place, motion, rest, or even existence; nor can it be perceived, named, or known. Conclusion: "But can these things about the one possibly be so? I do not think so" (Argument 1).

*Comment.* The hypothesis from which this argument starts is literally: "if there's one" ( $\epsilon\iota\ \acute{\epsilon}\nu\ \acute{\epsilon}\sigma\tau\iota\nu$ ), and differs from the succeeding hypotheses, which read: "the one if it is" (*sc.* exists,  $\acute{\epsilon}\nu\ \epsilon\iota\ \acute{\epsilon}\sigma\tau\iota\nu$ , Arguments 2, 3, 4), and "the one if it is not" (*sc.* does not exist,  $\acute{\epsilon}\nu\ \epsilon\iota\ \mu\eta\ \acute{\epsilon}\sigma\tau\iota$ , Arguments 5, 6, 7, 8). Thus the first argument really assumes the bare idea of oneness, and shows that from this bare idea the process of deduction yields only the negation of every other idea. Since these other ideas include the idea of otherness (139b 4), this hypothesis can have no opposite; and in fact the only opposite to assuming oneness would be not assuming oneness, in which case there would be no argument. Hence the remaining arguments are constructed on hypotheses in which the idea of existence or non-existence is combined with oneness.

B. If one exists (where 'one' and 'exists' are specifically said to have different meanings, 142c 4),

- (a) existent-one forms a whole with parts which have otherness and in fact any other quality, including contradictions (Argument 2).
- (b) the others are: (i) any other thing, including contradictions (Argument 3).
- (ii) nothing but others (Argument 4).



The general conclusion for B is: "Thus, if one exists, the one is both all things and nothing, alike with reference to itself and to the others" (160b 2, 3).

C. If one does not exist,

(a) it, (i) since it must be known and distinguished from others before it can be denied, must have a character which exists, and hence it must itself exist, which contradicts the hypothesis; and, moreover, it becomes the subject of all sorts of contradictory predicates (Argument 5).

(ii) since it does not exist, is a nonentity and has no character at all (Argument 6).

(b) the others, (i) since the one does not exist, will have to be other than one another; but this implies that each of them is a one, which contradicts the hypothesis that no 'one' exists. They will therefore only seem to be one, and, moreover, will seem to be all other kinds of contradictory things (Argument 7).

(ii) since there is no 'one', will be collectively nothing.

Hence there will be nothing at all (Argument 8).

The general conclusion for B and C is: "whether one exists or does not exist, it and the others, both with regard to themselves and to one another, are and are not and appear and do not appear to be absolutely everything" (166c 2-5).

If we look back over this second part of the dialogue, we see that three conclusions have been given, corresponding to the three main subdivisions of the argument, which I have labelled A, B, and C. The first conclusion states flatly that the results cannot possibly be true; the second and third conclusions are in the form of outright and obvious contradictions, which would have the same effect as the first. Thus we may say that this whole second part is a *reductio ad absurdum*.

### III

We may now put the two parts of the dialogue together and face the problems involved in its general significance. 'Parmenides' is the chief speaker in both parts; but in the first part he criticizes the Platonic theory of forms, while in the second part he offers a specimen of his own argumentation, which turns out to be a *reductio ad absurdum* of it. But to many scholars,



ancient and modern, it has seemed as incredible that Plato, speaking through 'Parmenides', should have criticized himself, as that he should have used 'Parmenides' to make Parmenides absurd; and accordingly the greatest ingenuity has been expended in finding hidden significance behind the 'ostensible' situation—the criticisms of the forms must be somehow fallacious, and the arguments in the second part must have some valid secret locked up in them. My own approach, however, working on the hypothesis that the dialogue may express Plato's state of mind when it was composed, suggests a more straightforward or, if you like, naïve interpretation.

This attitude implies, with regard to the first part, that Plato is bringing up real difficulties involved in his earlier theory of forms, and I have tried to show what these difficulties were. I find nothing inherently improbable in the supposition that Plato went on thinking about the forms after he wrote the *Phaedo* and the *Republic*, that this thinking brought to light certain difficulties in the theory, and that he expressed these difficulties in another dialogue. It was apparently not his way to bring out revised editions, but rather to go on producing; and an author who had both the dramatic power to produce the *Symposium*, for example, and at the same time the desire to follow truth "whithersoever it carries us", might, I think, publish criticisms of his own earlier views. If anyone says that Plato must have had in mind the answers to these objections, I can only plead my own *naïveté*—he may have had the answers completely formulated for all I know, but my respect for him does not seem to require me to assert this without evidence; and what he seems to say here is just that these particular interpretations of forms do not stand up under analysis, but that there must be forms of some kind to account for rational discourse. Furthermore, I do not contend that all the suggestions of Socrates and the objections of 'Parmenides' in the present dialogue are based on views expressly stated in earlier dialogues; indeed, I believe this is pretty clearly not the case with Socrates' mentalistic interpretation of forms and with 'Parmenides' symmetrical similarity between forms and particulars. These seem to be possible implications of earlier views, that were of philosophical interest to Plato at the time he composed this dialogue.

With regard to the second part of the dialogue, I wish to urge that it is not incredible as a *reductio ad absurdum*, if it concerns, not Parmenides, but 'Parmenides', that is to say, if it is pointed not at the doctrines of the historical philosopher of Elea, but

at a certain rationalistic position which Plato could not accept. I must accordingly deprecate both the emphasis on a dramatic date about a hundred years before its composition, with the implication that Plato is merely reproducing the philosophical issues of the previous century, and also the attempt to make it appear that Plato is primarily concerned with the methods and ideas of the historical Zeno and the historical Parmenides. The endeavour to make history out of Plato's dramatic settings seems to me in general a very doubtful proceeding; and in the case of the *Parmenides*, if it involves the supposition that Socrates at the age of twenty discussed his theory of forms with the Eleatic philosopher, it would be definitely improbable in the light of the autobiographical section of the *Phaedo*, which represents Socrates in his youth as engrossed in the investigation of nature and as coming to something like forms a good deal later.

Furthermore, the 'Parmenides' and the 'Zeno' of this dialogue are clearly different from the historical figures of the same names. Parmenides took a definite position and argued that the world "must needs be" what he said it was—there was no hypothesizing, such as we have in the present dialogue. The best interpretation of Zeno seems to be that he took just as definite a stand as his master, but attacked the views of his opponents by showing that their presuppositions involved contradictory consequences. He started, therefore, with those presuppositions, and did not set up contradictory hypotheses; and the so-called method of 'Zeno' in this dialogue is presumably an invention of Plato himself, as is suggested by the second preliminary observation of the second part, that Zeno's procedure must be extended. Furthermore, the concepts with which 'Parmenides' works in this dialogue are different from those of Parmenides and Zeno. The main idea of Parmenides was "What is", a single, eternal, indivisible sphere, which is clearly not the same as the one of this dialogue. Also Parmenides definitely maintained that "it is", whereas Plato considers the possibility that the one is not; and for Parmenides there could be no 'others', and neither he nor Zeno ever used the expression, so far as we know. It is therefore a mistake to suppose that Plato is here concerned primarily with Eleatic monism.

The main interest of this second part of the dialogue can best be understood by contrasting 'Parmenides' first preliminary statement, ruling out visible objects (135e 2), with the position taken by Socrates at the beginning of the first part (129a; cf. 130b), where he makes a distinction between forms and objects that participate in them. However difficult it was for Plato

to conceive accurately the relation between forms and particulars, and however much he exalted the forms at the expense of particulars, still the existence of particulars (equal sticks, the many beautiful things, beds) was always a fundamental datum in his problem and an essential element in his theory. Precisely the opposite is the case with the concepts of 'Parmenides' in the second part of the present dialogue—they are pure and completely abstract ideas, never specified by reference to any data, and consequently never precisely anything definite. Hence the arguments slide around among the notions of one, the one, ones, oneness, in a thoroughly vicious way; and much the same is true of "the others". This second part therefore shows reason at work with ideas that have no specific reference to the particulars of experience, and by means of the *reductio ad absurdum* it suggests that this kind of reasoning is illegitimate. However difficult it may be to formulate adequately the doctrine of forms in relation to objects (first part), still the attempt to deal with ideas without relation to objects is hopeless (second part).

But is it only 'ostensibly' hopeless? Is there some hidden truth behind these contradictions, as the Neo-Platonists and others more recently have maintained? The main point here concerns the validity of the arguments, and on this question opinions differ so radically that Professor Taylor (*Plato: The Man and His Work*, p. 366) calls some of the reasoning "purely sophistical" and "clearly consciously sophistical", while Professor Cornford (*Plato and Parmenides*, p. 115) holds that "the great bulk of the deductions are sound". How is it possible for two careful scholars to assess the same argument in opposite judgments? We can get at the reason for the discrepancy by noting the conditions under which Cornford finds the soundness, namely, (1) treating the first few sentences of each argument as a disguised or masked definition, which is taken as a premise for the following deduction, and (2) allowing that new premises are furtively introduced in the course of the argument. Surely one must wish very badly to approve an argument, if one is willing to swallow disguised definitions and furtively changed premises. Wouldn't most of us, as well as Plato, hold that it is an essential character of reason to strip off disguises and masks and everything furtive? Nevertheless, under his conditions Cornford makes a remarkably strong case for the soundness of what he admits as deductive process, from which we may infer that whatever unsoundness the rest of us feel lies for the most part in the region of definitions and premises.

There is, however, a prior question, namely, whether Plato

himself made the distinction between premises and deduction at all. Is a disguised premise really a premise? and is a masked definition really a definition? I find no warrant in the text of the *Parmenides* for this distinction. The general form under which the arguments are introduced is typified by the first argument, which opens as follows: "if there is a One, of course the One will not be many. Consequently it cannot have any parts or be a whole. For a part is a part of a whole", etc. (Cornford's translation). What we have here is an hypothesis and its consequences, but no definition or premise in any legitimate sense; and the same is true of the rest of the argument. It is all an inferential process, except for the hypotheses; and I find it impossible to escape the feeling that Professor Cornford simply takes as much of this process as is needed to justify the rest, and arbitrarily calls it a definition, for there is really no difference in the text between what he calls definition and what he calls deduction. Consequently he seems to me to be importing a distinction which Plato did not make, and in this respect to be unhistorical. It was really Aristotle who made the distinction between a formal process of deduction and the primitive concepts or original definitions from which it starts, and we should give him credit for it. Plato's *λόγος* and *λογισμός* were mental capacities or processes which embraced all that might be called dealing with general ideas, and included both the getting of them and the working with them, without distinction.

Thus what we have in these arguments in the second part of the *Parmenides* is the drawing out of the consequences from an hypothesis; and the hypothesis contains one or more concepts (the one, existence) which are not defined, but simply named. These concepts are so vague that contradictory consequences can be drawn from them, and that all kinds of meanings can be read into them by Neo-Platonists and other interpreters. Under these conditions can we really say that the deductions are sound or unsound? Even Professor Cornford has to admit (p. 115) that "a certain number are so vaguely worded that, with the evidence at our disposal, we cannot be sure of the true meaning". Yet, unless the conclusions actually follow, there is no point in the process of inference and the contradictions are meaningless. Professor Cornford, however, has made out a very convincing case for the soundness of most of the inference, so that Professor Taylor's "purely sophistical" seems much too strong; and I can see no reason why we should not suppose that Plato himself thought it was all sound enough

to make a *reductio ad absurdum*. Can we not say then that Plato has taken certain vague, abstract terms that had some obvious meanings in ordinary Greek usage, and drawn out contradictory sequelæ from them with so much plausibility that the net result is a conviction of fallacious thinking?

Plato does not point out just where the fallacy lies; but presumably he relied on his dramatic arrangements to supplement the express meanings of his text, and I wish to suggest that the contrast between the first and second parts may contain the clue. This contrast, as I have previously maintained, is between a theory that embraces both forms and objects, and a theory that leaves out the objects. The ideas with which 'Parmenides' works in the second part have the same names as the Platonic forms; but they are not forms, because they are not forms of objects. Hence Plato seems to suggest that the vagueness of 'Parmenides' terms results from his omission of objects. We might object that it is possible to define abstract terms properly, without raising any question of empirical data, and that when so defined, they will not yield contradictory deductions. But this seems possible to us only because we have had the benefit of Aristotle's formal logic; and I believe that Plato could not have taken this position. He seems to say that the absence of reference to objects allows ambiguities in concepts, which in turn permits them to be used for contradictory deductions, which stultify thinking about reality.

If this is the right interpretation of the second part, it is a mistake to suppose that Plato is here exhibiting the participation of forms in one another, to which Socrates had referred in his opening conversation with 'Zeno'. The terms with which 'Parmenides' deals here are not forms; and the combination and separation of forms is carefully and positively treated in the *Sophist*.

Thus the *Parmenides* as a whole is a study of reason, and reason appears in three rôles: (1) the knower of forms (Socrates); (2) the critic of the theory of forms ('Parmenides', first part); and (3) the manipulator of abstract, non-empirical concepts ('Parmenides', second part). The indications given in the dialogue suggest that Plato is prepared to accept the first two rôles and reject the third—he must have forms in order to account for knowledge, he is ready to recognize valid criticisms of his theory, but he repudiates a rationalism that turns its back on "the visible" world.

On this interpretation of the dialogue as a whole, it forms a companion piece to the *Theætetus*, which studies the claims

of sense-experience to give knowledge, as the *Parmenides* examines the rôle of reason in knowledge. Furthermore, both dialogues are mainly critical and destructive, even with regard to the forms; and they end without openly advancing any positive doctrine. Although the *Parmenides* suggests that reason is necessary for knowledge and for criticism, and the *Theaetetus* establishes a theory of sense-perception, they seem designed primarily to show what Plato was ready to reject, in preparation for his second great constructive effort in the series of dialogues from the *Sophist* to the *Laws*. In the most general terms it may be said that he rejects reason without sense-experience and sense-experience without reason as sole foundations for knowledge, just as later in the *Philebus* he will reject both pleasure apart from knowledge and knowledge apart from pleasure as sole constituents of the good.

#### IV

If the *Parmenides* expresses Plato's philosophical interests at the time of its composition, it should be possible to correlate the criticisms of the theory of forms in the first part with positions taken in later dialogues, and thus see how Plato tried to meet the difficulties.

The first difficulty, which concerned the extension of forms to objects which seem to have either negative value or no value at all, was apparently met by dropping the value aspect from the theory and conceiving the forms on the basis of real classes. Thus in the *Sophist* εἶδος and ἰδέα are used interchangeably with γένος, and the *Timaeus* specifically recognizes forms of corporeal objects. This idea of the common feature of a group of things "to which we apply the same name" (*Rep.*, 596a 7) had always been involved in the theory; but it is now freed from the restrictions of a valuational interest, so that it can be adequately illustrated by the instance, given in the *Theaetetus* (174b), of an inquiry into "what man is, and what powers and properties distinguish such a nature from any other" (Cornford's translation).

The second difficulty, which concerned participation conceived in a rather materialistic way, was apparently met by a more metaphysical approach. In the *Theaetetus* Plato expresses the idea of quality, coining a new word (literally, of-what-sort-ness) for the purpose; and the abstractness of the term would contrast with the concrete thinghood of the forms in some earlier de-

scriptions. Furthermore, he went on in the *Sophist* and the *Statesman* to show that forms participate in one another, so that the integrity of a form is consistent with subdivisions or species; and the whole theory is conceived on such an abstract level that there is no question of the form's losing its unity by this multiplicity or by the multiplicity of objects participating in it. Again, the tendency of the latest dialogues is to concentrate causal activity in soul, and there is no more talk of forms' "making" things what they are. Forms are principles of definiteness used by soul, and as such, can be generalized into the universal aspect of limit or finiteness in the world. The point of all this is that it moves on a metaphysical plane where it would be nonsensical to say that beauty is beautiful, and 'Parmenides' criticisms do not apply. From this standpoint it is misleading to say that the form is like the objects in so far as the objects are like the forms, for the likeness is definitely that of copies to an original pattern (*Timaeus*, 52), an asymmetrical relation which avoids 'Parmenides' infinite regress.

The third difficulty, which concerned the separation of forms to such an extent that they seemed to lose contact with experience, was met by a softening of the dualism. First, the forms are forms of objects, and thus rest definitely on a basis in sense-experience, as the classifications by the method of division (*Sophist* and *Statesman*) and the species of physical objects (*Timaeus*) imply. Secondly, although Plato continued to base the distinction between forms and objects on the distinction between reason and opinion, as he had in the *Republic* and the *Meno*, opinion is now given "a decidedly higher value" (Taylor, *Plato*, p. 340), and reason is more rational and less visionary. Finally, the sharp opposition between changeless forms and changing objects, as if they belonged to two different worlds and the one was what the other was not, is apparently dropped—there is now only one world, a more complicated world than the old dualism suggested, with four principles that co-operate. Plato tended to speak of the formal principle as the real factor, but he did not think of the other factors as unreal, and he specifically admitted life, soul, and intelligence to reality (*Sophist*, 248e 5).

Thus it is possible to correlate the criticisms of the theory of forms not only with the views expressed in preceding dialogues, but also with positions taken in the later dialogues. But this must not be taken to imply that the positions taken in the later dialogues were themselves without difficulties. There are obvious questions that arise in regard to these later views—



is the formal principle any more real than the three other principles? is the pattern-copy concept metaphorical or mythical? what is the relation between goodness and reality? But I do not have to prove that Plato's later philosophy was perfect in order to show that it tried to meet the difficulties in his earlier thought.

If now we use the development of this theory of forms as a clue to Plato's general intellectual development, might we not put it in the following way? His mind in youth, perhaps somewhat overstimulated by the military and political turmoil of Athens and especially by the shock of Socrates' trial and death, was marked by an extreme fertility, which poured forth a stream of brilliant works, developed from an original impulse to disclose the real genius of the master whom his countrymen had condemned and executed; and the constructive momentum and richness of this period resulted in a wealth of suggestions, with a low degree of scholastic systematisation. This was as true of the theory of forms itself as of the other doctrines; and it is accordingly a great mistake to consider it 'technical' and emphasize certain references, while neglecting others. The form of the bed in the *Republic* is apparently a form with as good a right as the form of beauty in the *Phaedo*; a form is a thing, and also the form of other things; it actually makes objects have its character, but nevertheless it does not change; it is by itself, yet other things participate in it; and it is necessary for us to unify our sensations by a process of reason to know a form, although we can only know the form by recollection of having seen it in a previous existence. These are various aspects of the theory in the dialogues down through the *Republic* and the *Phaedrus*; and the state of mind they reveal is typical of the whole thought of this period.

After these dialogues, there seems to have been a long gap in Plato's writing, during which no doubt his energies were absorbed by the Academy; and when he returned to literary composition in the *Parmenides* and the *Theaetetus*, he showed the effects of a careful, systematic, critical study of fundamental points, that is appreciably different from the buoyancy of his earlier dialogues, and that may well have originated in the questions of his students. It is noteworthy that three passages in the *Parmenides* (127c 5, 130e 1, 135d 6) emphasize the youthfulness of the Socrates whose theory of forms is being criticized; and it is much more plausible to interpret these passages as expressing the feeling of the mature Plato toward his own early ideas than it is to suppose that they refer to the historical Socrates at a supposed meeting with the



historical Parmenides in the middle of the previous century. Plato is now frankly and carefully facing some of the difficulties in his youthful doctrines, and as ready to modify any that will not stand the test of criticism as he is to develop the views of other schools, like the Eleatic-Megarian and the Heraclitean-Protagorean, to their logical conclusions for his own present purposes.

After this clearing of the ground in the *Parmenides* and the *Theaetetus*, Plato went on to a new constructive period, the results of which are expressed in the dialogues from the *Sophist* to the *Laws*. No one can follow him here as he works out the meaning of negation, wrestles with the idea of goodness, constructs a cosmology, and formulates a theory of motion, without realizing that his tremendous originality is still intact and vigorous, so vigorous in fact that it can drop Socrates and speak through other mouthpieces; but it is a more disciplined and sober, a less artistic and poetic capacity than that of the early period. It is a capacity which balances theories, and attempts compromises between extremes, and emphasizes mixture; and it tends to interest a different group of readers from those who become enthusiastic over the high soaring of the *Phaedo*, *Symposium*, and *Republic*. It is a Plato much closer to Aristotle than the enthusiasts of the earlier Plato like to admit. But it is still Plato, and it still believes in forms. Surely it is unwise to speak, as Professor Taylor does (*Plato*, p. 348), of a "silence" regarding forms in the last group of dialogues, and say that "the forms are mentioned only in two of them: the *Parmenides*, where the doctrine is said to be that of Socrates in his early years and is criticized by Parmenides and Zeno, and the *Timaeus*, where it is put into the mouth of a fifth-century Pythagorean". The Greek words *εἶδος* and *ἰδέα* that are frequently used in the early dialogues, occur all through this last group; and while I have tried to show that there is an appreciable shift in the meaning, it is better understood as a development of the same idea than as one idea being displaced by a different idea. For Plato kept the old terms, and on the foundation of the theory there was no shift—Plato believed at the end, as he had at the beginning, that some kind of forms must be posited in order to account for the difference between reason and opinion, and to justify knowledge.

### III.—SOME RECENT CRITICISMS OF SPINOZA (I.).

BY H. F. HALLETT.

It is not possible within the limits imposed by my present medium to offer a full and general treatment of the strictures passed upon the philosophy of Spinoza by the critics whom I have chiefly in mind in this series ;<sup>1</sup> but it has seemed to me that by selecting a few of the more fundamental topics that lie at the roots of their outstanding criticisms I might at once, without giving the impression that I regard the philosopher as above correction, make a rejoinder congruent with the influence and importance of these writers, obliquate the point and directness of their objections, and suggest to those who are interested in these matters the proper basis for the elaboration of that more complete elucidation that must await the re-establishment in Europe of a republic of letters.

#### I. *Attitude and Method.*

First let me make some reference to what is, I think, a real difference between the attitude adopted towards Spinoza as a philosopher by all these critics (though in ways variant according to their personal and literary idiosyncracies) and that which I defend as the only effective approach to that understanding of a system upon which cogent criticism can be founded. Acquaintance with the writings of a philosopher, however extensive and accurate it may be, does not seem to me a sufficient basis to work upon : this must be supplemented and corrected by a sympathetic rethinking and development of his speculation, and especially where its categories lie outside of current modes of philosophical thought. Mr. Barker twits me with being "a wholehearted follower and defender" of Spinoza,<sup>2</sup> and

<sup>1</sup> Viz., H. Barker, *Notes on the Second Part of Spinoza's Ethics* (MIND, XLVII, N.S., 1938, pp. 159-179, 281-302, 417-439). H. H. Joachim, *Spinoza's Tractatus de Intellectus Emendatione, A Commentary*. Oxford, 1940. A. E. Taylor, *Some Inconsistencies in Spinozism* (MIND, XLVI, N.S., 1937, pp. 137-158, 281-301). Referred to as "B", "J", and "T", respectively.

<sup>2</sup> B., p. 166.

Joachim with advancing a "speculative exposition" (the term is mine) upon "most slender and ambiguous evidence, or upon no real evidence at all";<sup>1</sup> what neither seems to understand is that my view of method and evidence conflicts with that which they scholiastically adopt; that although my "discipleship" in *Aeternitas* may originally have been promoted by recognition of Spinoza as "the philosopher's philosopher" and "an Israelite indeed in whom is no guile", it need not have been, and in its effect on my work was not, more than a "methodological discipleship"; and that part of the evidence for my exposition was admittedly not to be found in proof-texts, but was "evidence" only for those content for the time to rethink the doctrine under a serious and sustained effort to interpret the philosopher in accordance with the principles that vitalized his thought, even when, nay especially when, perhaps because of their diagnostic character, those principles receive no explicit formulation in his actual text. I need not deny that this involves a formal *circulus in exponendo*, logical circles are unavoidable in many important branches of inquiry, including all induction; and I agree, of course, that at all costs an expositor must avoid any tendency to ignore "hard sayings" or to take the supposed opinions of the philosopher as sacrosanct, for that means an end of criticism; but, on the other hand, an even more subtle, though avoidable, danger both to exposition and to criticism is the natural bias towards interpreting the text in the light (which so often is darkness) of presuppositions and categories that belong to the thought of the would-be critic's own place and epoch, but are no more than a morbid infection when introduced within the Spinozistic *corpus*.

It will be generally admitted, rarely without some sense of sin, that the *odium philosophicum* with which Professor Taylor's treatment of Spinoza is so freely imbued is the worst possible basis both for understanding and effective criticism. I will even say that some tincture of the *amor philosophicus* that moves Professor Taylor when he is dealing with Aquinas, and that at one time moved him in dealing with Bradley, is no bad thing in philosophical interpretation; for, besides adding gusto to the research, it may provide counterbias to the tendency of minute scholars to exclude the operation of concepts that find no direct textual expression, and then, like Nature, "abhorring a vacuum", to fill the *lacunae* by means of principles and *schemata* that operate in *their* minds after the same fashion

<sup>1</sup> J., p. 48, note 2.

as the speculative principles at which they jib must have operated in the mind of the thinker they seek to expound. Knowledge is a form of love, though in philosophical exposition I agree that the *amor philosophicus* should be methodological rather than (as Kant would say) "pathological": understanding is *intellectual* love.

Finally, let me once more emphasize what was made abundantly clear to the careful reader of *Aeternitas*, that my exposition of the philosopher was "speculative" and not "imaginative", and that in its main construction and detail it was (*pace* Joachim)<sup>1</sup> intended to be historical. In dealing with a thinker such as Spinoza, whose leading principles are remote from the conventional thought-modes of more recent philosophies, historicity is only to be achieved by sympathetic speculative insight; and the ultimate test of the truth of the exposition is not the discovery of *dicta probantia* but the refocusing and consequent revivification (within the limits set by the text, and under the sweep of Occam's razor) of the textual vestiges of a living thought defaced and distorted by the moving stream of human culture.<sup>2</sup>

## II. Cause, Agency, and Time.

(i.) No element in the theory of Spinoza has been a more frequent source of misunderstanding and misinterpretation than his conception of causation. Common views, as Barker points out, are that he "confuses the relation of cause and effect with that of ground and consequence, or that he resolves the former into the latter, or even that he ignores or rejects the former altogether".<sup>3</sup> As against these views his critic is willing, on the one hand, to find a degree of community in the two relations, and on the other hand, to believe that Spinoza did not overlook the distinction: that in admitting that a finite mode cannot be deduced from its Attribute, but must be determined by another finite mode, and this by another, to infinity<sup>4</sup> "he surely must have thought of the relation of cause and effect in its ordinary sense".<sup>5</sup> But Barker's defence (if it may be so called) is based upon what I must call the same faulty concep-

<sup>1</sup> J., p. 48, note 2. The work as a whole was, of course, not exclusively historical but aimed also at developing the Spinozistic way of thought, and critically relating it to some recent philosophies that are, or are supposed to be, in debt to Spinoza.

<sup>2</sup> The reader must not infer that I subscribe to Professor Collingwood's theory of ultimately alternative metaphysical systems.

<sup>3</sup> B., p. 175.

<sup>4</sup> *Eth. I, xxviii.*

<sup>5</sup> B., p. 176.

tions of Spinoza's causal doctrine as the common view that he is correcting, *viz.* that (1) the relation of the Attribute to what follows from it is that of ground and consequent; and (2) that the determining series of finite modes is a series of objects or events "each coming into existence, lasting for a time, and then ceasing to exist",<sup>1</sup> each necessarily determining its successor with a necessity that is "for us unintelligible, since we are referred back from mode to mode indefinitely, and can never see, with full comprehension, *how* any particular mode is necessitated to be what it is".<sup>2</sup>

What I wish to assert with the utmost emphasis is that such an interpretation of Spinoza's doctrine is essentially erroneous: it is in any case expressly ruled out by his undoubted view of the nature of time. This he plainly describes as no more than an "*auxilium imaginationis*".<sup>3</sup> Here again as in other parts of his account to which I shall have to refer, Barker is allowing his analysis to be governed by the confused principles of *Imaginatio* and its objects, and not by adequate knowledge in its apprehension of *res in se*: it is the perception of spatio-temporal objects, and not the conception of real entities, that is providing the thought-model. Spinoza's central causal theory refers to the world of adequate knowledge as it is directed to *entia in se*, and its application to transeuncy must be governed by derivation therefrom. What is wrong with *Imaginatio* is precisely that it *excludes* real causality, that it substitutes inadequate "connexions" such as those named by Barker as the proper meaning of "cause" as distinct from "ground", which are not only "unintelligible" to us in the sense of not being fully apprehensible, but as involving, if not, as Hume asserted, no more than habitual associations, at least, as such, largely devoid of causal efficacy. This is, perhaps, the intention of the statement that Barker quotes from Joachim: "the term '*causa*', in its more ordinary meaning, has no place in Spinoza's Philosophy, nor does he intend it to be understood in a sense implying temporal sequence".<sup>4</sup> Causality does not operate through an independent "time"; on the contrary, time is a subordinate product of eternal causality in the confused and mutilated "imaginative" experience of a finite mode.

It must not, however, be inferred from this either that Spinoza has no concern with transeunt causality among finite modes, or that his conception of causality is indistinguishable from that

<sup>1</sup> *Loc. cit.*<sup>2</sup> *Loc. cit.*<sup>3</sup> *Ep. xii.*<sup>4</sup> B., p. 175, quoting from *A Study of the Ethics of Spinoza*, p. 53 (-54), note 1.

of logical implication. This latter interpretation of Spinoza runs through both of Joachim's commentaries and determines a great part of his adverse criticism. Thus he tells us that "it is not clear whether Spinoza was fully aware what a 'logical' *nexus* implies. One property of a spatial figure 'follows from' another, because the positive character of the figure demands for its construction and maintenance precisely these spatial elements with their distinctive characters and mode of inter-connexion. The conclusion 'follows from' the premisses, because the positive character of the whole of significance which they express requires for its construction and maintenance precisely these elements with their distinctive significances and mode of coherence. In other words: every connexion of content (every 'geometrical' or 'logical' *nexus*, therefore) implies a significant whole dominating significant elements."<sup>1</sup> "A triangle is—in relation to space—an abstracted portion of a whole with which other abstracted portions are connected as consequents with ground."<sup>2</sup> "No spatial property can be 'deduced' from space as a whole, in the way in which it can be deduced from other properties or parts within the whole. For all such 'deduction' rests upon the controlling conception of the whole, and is valid only within it. And the whole itself cannot appear as one term in a series of conditions and conditioned. Now, for Spinoza, God is the ultimate whole within which all connexions are, and in whose unity all relations disappear or are absorbed. Hence no details—no characters or connexions of the finite—can be 'deduced' from God, in the way in which they can be deduced from one another under the controlling conception of God."<sup>3</sup>

The same view underlies the *Commentary* on the *Tractatus de Intellectus Emendatione*, and determines its most depreciatory conclusions: "Is it really possible to *deduce* anything whatever from the conception of the whole. . . . Is it not a commonplace of Logic, a familiar and indisputable doctrine, that our thought, in deducing, never proceeds *from* the whole; that it moves always from part to part *within* the Whole (or within *a* Whole) and in accordance with its dominant character or the principles of its totality?"<sup>4</sup> This is a criticism that is, he tells us, aimed at the "very heart and vital centre" of Spinoza's philosophy, and his contemptuous rejection of the second part of the doctrine

<sup>1</sup> *A Study of the Ethics of Spinoza*, pp. 230-231.

<sup>2</sup> *Op. cit.*, p. 117.

<sup>3</sup> *Op. cit.*, pp. 117-118.

<sup>4</sup> *J.*, p. 69.

of Method <sup>1</sup> suggests that, in spite of his incidental suggestion <sup>2</sup> that the criticism may be "less formidable" than it seems, he held by it to the end. It is, I think, an instructive commentary on Joachim's anxiety to confine himself to what can be extracted from the *ipsissima verba* of the texts, without a "speculative" search for the governing conceptions in the light of which alone the texts can be brought to a candent focus, that it never seemed to occur to him that he might be misinterpreting the doctrine in accordance with an imported but erroneous view of Spinoza's conception of causality as that of logical "implicatory linkage".<sup>3</sup> "Speculative exposition", it seems, pitchforked from the field as it may be, and with a contemptuous flourish, *tamen usque recurret*; and expelled as a presumed intruder, it returns as a real traitor. "God is the cause of all things", says Joachim, "only as the conception of a (*sic*) triangle is the cause of its properties. . . . As, with Spinoza, '*Deus agit*' is equivalent to '*ex Dei natura sequitur*' so '*causa*' is identical with '*ratio*'", and, in parenthesis, "Spinoza, it is true, frequently speaks of God as the *efficient* cause of all things; but *efficient* is little more than another expression for not-final".<sup>4</sup> To entitle such "exposition" "speculative", when its effect can only be to darken all counsel, would be absurd: *lucus a non lucendo*, and I can only echo the words of Joachim's own protest: "Where, I ask, is the evidence for this? . . . It is to be feared that there is no evidence whatever—or nothing beyond a few ambiguous and uncertain indications" including general assumptions based upon conceptions imported from a different tradition by a commentator careless of the necessity of standing outside of it to view his subject on its own ground with speculative sympathy.

Spinoza's views on divine causality appear to have suffered but little change between the hypothetical period represented by the *Short Treatise* <sup>5</sup> and the final correction of the earlier sections of the *Ethics*.<sup>6</sup> In both accounts it is emphatically asserted that God is the *efficient* (*werkende, efficiens*) cause of all things; and, in greater detail, the *indwelling* or *immanent* (*inblyvende, immanens*) as opposed to the *transeunt* (*overgaande*,

<sup>1</sup> "It is difficult to see any value whatever in this part of the doctrine of method" (J., p. 223).

<sup>2</sup> J., p. 70.

<sup>3</sup> J., pp. 97, 102, etc.

<sup>4</sup> *A Study of the Ethics of Spinoza*, p. 53 (-54), note 1. The final emphasis is mine.

<sup>5</sup> *Korte Verhandelng van God, de Mensch, en deszelfs Welstand*, I, iii; cf. also *Zamensprekinge*, i, ii, et passim.

<sup>6</sup> *Eth. I, xvi et Corr. i, ii, iii; xvii et Cor. ii; xviii; xxv; and xxviii, Sch.*



*transiens*); the *free* (*vrye, libera*) as opposed to the "*natural*" (*natuurelyke, "ex solis naturae legibus et a nemine coactus*); the *first or initiating* (*eerste, beginnende, prima*) cause; *causa per se* (*door zich zelfs*) as opposed to the *accidental* (*door'n toeval, per accidens*); *causa proxima* (*naaste*) of the infinite and unchangeable things; the *relatively*<sup>1</sup> *remote* (*laatste, remota*) cause of finite singulars; and the *universal, totally selfdetermined* cause of every kind of effect (*van zich zelfs en . . . van alle andere dingen, sui . . . (et infinitorum) infinitis modis*). The *Short Treatise* is important, however, because it further elaborates and emphasizes the positive conception of "efficiency", and shows clearly enough that it is very far indeed from being "little more than another expression for" non-finality: God is the efficient cause of things in so far as he is not merely "active" in the sense of producing his effects by an activity arising from, and subsidiary to, his essence, for his essence is his action; and thus he is an *outflowing or emanent* (*uitvloeyende*) cause, *generating* (*daarstellende*) *operating* (*werkende*), *doing* (*doende*), essentially productive: no mere content or object, but *agent par excellence*. Thus God's causality is as remote from logical implication or inference as it is from vulgar "natural causation" or temporal succession without real productivity. In the *Ethics* he further emphasizes the principle that God is the efficient cause of both the essence and the existence of all things; but what is remarkable is that in this later account the whole subject of divine causality is introduced by a formal statement of the relation of "definition" and "property" that should put any unbiased and alert reader on his guard against jumping to conclusions such as those of Joachim. "From the given definition of any thing a number of properties necessarily following from it (*i.e.* from the essence of the thing itself) are inferred by the intellect; and more properties in proportion as the definition expresses a greater reality."<sup>2</sup> This makes the number of properties that can be deduced from a definition the test of its adequacy—a principle that condemns as inadequate the conventional definition *per genus et differentiam*. The objection raised by Tschirnhaus<sup>3</sup> that very few properties follow from such a

<sup>1</sup> Evidently only a purely transeunt cause could be *absolutely* remote—and this, for Spinoza, is no cause at all, though empiricists appear to take it as the only cause.

<sup>2</sup> *Eth. I, xvi, Dem.*

<sup>3</sup> Tschirnhaus (*Ep. lxxxii*) thought that one property can be deduced from the definition taken alone; according to Taylor (*T.*, p. 145) "you can deduce none". The truth is that a definition taken *strictly* alone ceases to be an operative definition at all and becomes a mere *design*.

definition taken alone does no more than re-inforce Spinoza's estimate of its value. He holds that our definitions must be

The uniformity of the circle, that Tschirnhaus names, is deducible from the definition only when this is put into operation and realized as a "circumference". It is not possible even to deduce the triangularity of the "trigon" from its definition as a three-sided rectilinear figure without putting the definition to work in a "construction". It is certainly true that the inadequate, impotent, "nominal" definition, without the additional "dominant whole" of Joachim, is of very limited fruitfulness towards yielding any, not to say full, deduction of properties; and this "whole" represents the real principle of generation. This is so notably with the Euclidean definition that indicates primarily the way to "describe" the figure—a necessary preliminary for the Euclidean method of proof. It is still true also in some measure of the "equation" that constitutes the Cartesian definition (which indicates the formal structure and self-determining agency in relation to axes of reference). But not of the real, adequate, genetic definition that Spinoza desiderates, which possesses in itself, and in its intrinsic sources, the *nîsus* of its own development. Every definition so far as it is scientifically effective makes some contribution to this end, but it is only fully realized in the adequate, genetic definition or "idea" of an active singular or *commune*. Thus the real point about Joachim's "dominant whole" is that whatever definition we take, the investigation remains nugatory until we put the *conceptum* to work out its own properties, either by "construction" in relation to the *schema* of a "dominant whole", or under its own proper agency. And the latter is the only *metaphysically* sound procedure. The common view of Geometry as a science of passive geometrical species requiring to be operated upon under investigation, however sufficient for book-mathematics, is a metaphysical crudity. For though it is true that Geometry falls under *Ratio* as a science of *communia* and not *singularia*, yet the operations of the geometer upon these *entia rationis* must conform to *their* intrinsic agency. The triangle has "a will of its own" and dictates the operations that the geometer imputes to it (and can impute only because the triangle is a *commune* in which his own body participates). "Empty space" cannot produce "triangles, parallelograms, circles, hyperbolas" (T., p. 140) for it lacks even the agency that they possess: it is a *non-ens*; but the geometer can produce them because the common agency lies within him by which *Extensio* eternally expresses its nature in them. This, indeed, is the root of the possibility of *Ratio* as a form of knowledge: it is founded on the community of man and nature. So far as this community extends the scientist can understand and perform the correct operations to produce the "common properties" that constitute his scientific objects. The further question whether a *commune* (e.g. extension, motion and rest, man, triangle, etc.) is also a singular is less easy because Spinoza himself *seems* to vary in his view (cf. *Aeternitas*, p. 89 (-90), note 1). "Extension" and "motion and rest" in themselves are clearly infinite singulars, "fixed and eternal things", yet common to all bodies *quatenus* extended and mobile, though as expressed in this or that body neither is a singular but an accidentally abstract *commune*. But not every body is human or triangular, so that "man" and "triangle" are essential abstractions from the total agency of *Extensio*, and their singulars finite and plural. Neither "constitutes the essence of a singular" (*Eth. II, xxxvii*): "man" is not a man, nor

emended in such a way as to facilitate the deduction of *all* the properties. If we are to apply deduction with *metaphysical* propriety we must substitute real, *i.e.* genetic, definitions for these conventional conceptions that will not generate properties without additional "construction" matter, or subordination to an extrinsic "dominant whole".<sup>1</sup> The definition of a singular or *commune* shows its adequacy by its genetic power. This is expressly stated by Spinoza in one of his letters to the same correspondent,<sup>2</sup> and the connexion of the doctrine with the theory of causation, suggested by the sequence of the exposition in the *Ethics* to which I have referred, is made clear: "In order that I may know from which idea of a thing out of many all the properties of the thing may be deduced, I observe only that the idea or definition<sup>3</sup> of the thing should express its efficient cause. In order to investigate the properties of the circle, I ask whether, *e.g.* from the idea of the circle as containing infinite rectangles, I can deduce all its properties: *i.e.* whether it involves the efficient cause of the circle. Since this is not so, I seek another definition, *viz.* the space determined by a line one end of which is fixed and the other movable. As this does express the efficient cause I know that I can deduce from it all the properties of the circle". Similarly he claims that

"triangle" a triangle. In themselves they are mere *communia*: *entia rationis*. (*De Intell. Emend.*, § 95.) But the degree of abstractness from the total agency of *Extensio* suffered by "man" is vastly different from that of "triangle": though "man" and "triangle" alike as objects of *Ratio* are abstract *communia* and not concrete singulars, this or that man, as a microcosm of *Extensio*, both endures as a part of nature and enjoys an impoverished eternity *quatenus Extensio*; whereas this or that triangle, by reason of the poverty of its content *qua* triangle, may have but minimal duration and the almost negative eternity of near timelessness (like the *corpora simplicissima* which it might inform); such may, indeed, endure, but less by reason of its triangularity than of some more complex structure with which this is concentered. This or that man, on the contrary, endures and is eternal by reason of his microcosmic manhood.

<sup>1</sup> This is one of the virtues of the Cartesian geometry: the "equation" of the figure is the formula for generating it—the "micro-form" that expresses the genetic structure of the "macro-form"; and it is thus that properties may be deduced from it without reference to a "construction" (though axes of reference are, of course, involved). The "dominant whole" is more fully implicit in the equation than in the Euclidean definition, and thus does not need to be brought to bear extrinsically, or not in the same degree.

<sup>2</sup> *Ep. lx.*

<sup>3</sup> The definition of a thing is its adequate idea: the thing is never an abstract species, though it may be a *commune*. Reality is agency, and a *commune* is the common agency of many singulars even when it is not itself an infinite singular.

while the Cartesian definition of God as *ens summe perfectum* yields no ground for a full deduction of his properties, because it does not express the efficient cause; his own definition<sup>1</sup> is free from this defect: a definition in terms of Attributes is genetic or immanently efficient.

Thus for Spinoza the efficient cause is not a temporally prior existent from which there issues transeuntly a temporally posterior effect; still less is it such a sequence without the supposition of productivity.<sup>2</sup> The adequately defined circle or sphere is real because it generates its own properties; though as a finite<sup>3</sup> derivative its reality is conditional upon the provision of its proximate causes. The reality of the *causa prima*, on the other hand, is unconditional: it is *causa sui*; and things generated by *Deus sive Natura naturans* are real in the manner and degree of their essential relation with that generating source. Thus while from an inadequate definition of the circle properties only follow within the "whole" or "system" "set" by the axioms and postulates, and elucidated by a "construction", it is the circle itself, entailing all its properties,<sup>4</sup> that constitutes

<sup>1</sup> *Eth. I, Def. vi.*

<sup>2</sup> *E.g.*, a "natural" cause in the modern sense which, as Hume proved (and his point here is in no way met by the "answer" of Kant) is unproductive: it is not a *causa efficiens* but a *causa inefficiens*, and that *par excellence*. Kant re-interpreted "natural" causality by re-interpreting "nature" as phenomenal, *i.e.* as being neither "subjective" nor fully "real", but "objective".

<sup>3</sup> The circle of Geometry is, of course, not finite as possessing definite size, either relative or absolute: its finiteness is its partiality, and this expresses itself in this or that circle according to its context. The circle is not a circle but a genetic structure.

<sup>4</sup> *Cf. Bosanquet, Logic, I, p. 227*: "Rose in the abstract does not exist. But it is a concrete universal which has power in the context of the real world to which we refer it, to dictate the epoch, place and quantity of its individual embodiment". For Spinoza, on the other hand, "rose" is a finite *commune* that governs its multiplex expressions in their inner constitution and external relations with their actual contexts; but their "epoch, place and quantity" is determined by the "structure of the whole universe". *Cf. the very important discussion of Eth. I, viii, Sch. ii*: "The definition of the triangle expresses nothing but the simple nature of the triangle (*simplicem naturam trianguli*)". "In order to give a reason why, for example, twenty men exist" (simultaneously and without predecessors), "it is not enough to give a cause for human nature generally; but it will be necessary in addition to give the cause why no more and no less than twenty exist, for . . . there must necessarily be a cause why each exists. But this cause cannot be contained in human nature itself, for the true definition of man does not involve the number twenty. . . . Whenever it is possible for several individuals of the same nature to exist, there must necessarily be an external cause for their existence", *i.e.* a cause not contained in the adequate definition of that *commune*.

the *ideatum* of the causal or genetic definition or "idea".<sup>1</sup> This accounts for Spinoza's interest in the "illusory project"<sup>2</sup> of the *Tractatus de Intellectus Emendatione* of explaining the right way of discovering true definitions:<sup>3</sup> the definition must explain "the innermost essence of the thing". Postulating the proximate cause, it must posit the thing as producing all its properties *in intellectu*; and thus show the manner of its production *in re* from its *causa proxima extensa*. So the definition of *Deus sive Natura qua causa sui* posits its essence, and *qua causa infinitorum* generates all its properties *in intellectu*; and on the same principles enacts itself and creates all its properties *in re*.<sup>4</sup>

I cannot but think, therefore, that the "fundamental confusion of thought" that Joachim "suspects" in this part of the *Tractatus* is really in the mind of the commentator who has supposed that Spinoza's framework "may be roughly described as the Aristotelian or Scholastic doctrine in regard to essence and definition and their mutual relations".<sup>5</sup> It is true that he admits that this doctrine is "profoundly modified" in Spinoza's thought by his refusal to recognize the reality of *genus* and *species*, and to identify the essence with the *infima species*—but "profoundly modified" remains an understatement in view of Joachim's meagre effort to take up Spinoza's own epistemological

<sup>1</sup> The finite *commune* "circle", not this or that singular circle, i.e. this or that body *quatenus* expressing the *commune*. This or that circle unless it is composed of *corpora simplicissima* expresses also other modes of agency, so that its singularity, such as it is, is conditional upon the operation of its total proximate causes (*De Intell. Emend.*, § 72). Truth consists in the self-containedness and self-maintenance of an idea; and so far as this is imperfect the idea is inadequate because it involves what is not "contained in the *conceptum*" (*ibid.*), and its object false, fictitious, dubious, or at best conditional, according to the manner of the involution. With the infinite *communia* (extension, motion and rest, the universe) the conditions of truth are fulfilled, for their proximate causes are given with them; and *a fortiori* with *Deus sive Natura* from the definition of which there flow "infinite things in infinite ways, viz. everything that can be conceived by infinite intellect" (*Eth. I, xvi*).

<sup>2</sup> J., p. 212.

<sup>3</sup> It is borne out by the rules that he gives for framing the true definition of a created thing: it must include the proximate cause, and must enable us to deduce all the properties of the thing by itself alone (*De Intell. Emend.*, § 96).

<sup>4</sup> Cf. *op. cit.*, § 97, which also makes it clear (*sub. III*) that these properties are not abstract attributes existing only as inhering in a substance, but existents. With created things, however, they may be finite and dependent. The properties of finite *communia* are abstract with their causes, and these are *entia rationis* (*De Intell. Emend.*, § 95).

<sup>5</sup> J., p. 209.

standpoint in the exposition of his thought; so that it is little wonder that the whole project appears to him as "illusory".<sup>1</sup>

(ii.) So far I have spoken of the general concept of causality, where the effect can be clearly and distinctly perceived through the cause alone. This is what Spinoza styles "adequate causation".<sup>2</sup> Let me now consider the nature of "inadequate" or partial causality, where the effect cannot be understood through the ostensible cause taken alone.<sup>3</sup> Though it is an essential element in the theory of Spinoza that adequate causation is not excluded from the finite mode as such, yet it is solely among these that inadequate causality is found. That we cannot trace the inadequacy of causes to their modality, to their being defined as *in alio* and as conceived *per aliud*,<sup>4</sup> is evinced by the adequacy of the causation of the "infinite modes", which are none the less modes though they are infinite. That the contrary has sometimes been supposed is due to confusion as to the identity of the *aliud* of a mode. Even with the finite mode this is not another mode to which it is temporally sequent, as Barker assumes in his interpretation of *Ethics I, xxviii*, the *locus classicus* for this topic: "Spinoza had in view this series of finite modes, each coming into existence, lasting for a time, and then ceasing to exist".<sup>5</sup> This is an entire mistake: the *aliud* of a mode *qua* mode is its proximate genetic cause, and primarily and originally *Substantia* itself. This is corroborated by the original definitions of *Ethics I*, and also by the doctrine of the "infinite modes", but it applies none the less to finite singulars, though with suitable restrictions. Though Substance is the essential *aliud* of the mode *qua* mode, it is not the direct or immediate, but the primary and original, *aliud* of such "remote" effects as the finite singulars: here the strictly adequate cause includes only the *proximate* cause, and not the full creativity of *Deus sive Natura naturans*. It does not follow, however, that the immediate *aliud* of a finite mode is another finite mode preceding

<sup>1</sup> It would be truer to say that Spinoza's view of logical implication is active intellectual causation than that his view of causation is identical with "implicatory linkage" as commonly conceived by logicians. It is intellectual production or productivity.

<sup>2</sup> *Eth. III, Def. i.*

<sup>3</sup> Evidently, then, a "natural" cause in the modern sense is inadequate in the highest degree; for, as Hume saw clearly enough, there is no *power* in such a "cause", or no power that can be understood, to necessitate the "effect". Berkeley had already asserted that *real* causality means *agency*, and not significant succession, but had failed to follow it up.

<sup>4</sup> *Eth. I, Def. v.*

<sup>5</sup> B., p. 176; cf. also J., p. 116.

it in time and perishing at its birth: that is an illusion of *Imaginatio* aided by time. Here too the *aliud* is that which generates the finite mode (as the circle by the rotating line), and the causality is essentially immanent, not transeunt. The infinite series of causes to which *Ethices I*, xxviii refers is not a temporal regress to an impossible "first" cause, but the involuntary sequence of eternal causes to a necessary First Cause: from a conditioned effect through a hierarchy of increasingly adequated causes to the adequate cause of all things. Transeunt causality is the confused and fragmentary appearance of a causality that derives from a broadening stream of immanency. Thus every finite mode is fully subject to the immanent causality expressed in its true definition, and "imaginatively" subject to the transeunt causality that expresses its dependence, as finite, upon a complement. But this very dependence is the expression of its derivation from a source that also provides that complement; so that this is only its "imaginative" *aliud* because the real *aliud* generates it. Thus also its complement is never wholly "other", except in so far as it is falsely imagined as a disconnected temporally precedent singular: in which view it ceases to be *causal*.

Thus the difficulty that so many commentators have emphasized in understanding how Spinoza supposes himself to proceed from infinite and eternal *Natura* to the finite singulars, is a difficulty only of fact (acknowledged by Spinoza),<sup>1</sup> and not of principle. If the finite modes were no more than spatio-temporally external sections of *Natura naturata*, exerting only an unintelligible transeunt causality on one another, the difficulty of their deduction would be an insoluble riddle of principle; but that is no more than a confused "imaginative" expression of the hierarchical immanency that unites them to their infinite generating source. Each in itself is *Deus quatenus*,<sup>2</sup> and though it is in fact impossible for a finite being to trace in complete detail the generation of finite singulars from *Natura*, yet we can do this in part and conditionally in so far as we can possess an adequate idea of the Attributes of Substance, and thus trace their immediate and mediate proximate effects, and discover, here and there, the proximate causes of finite things. The human mind has "an adequate idea of that which is common

<sup>1</sup> "I do not know how the parts of *Natura* are really interconnected, and how each part accords with the whole; for to know this it would be necessary to know the whole of *Natura* and all its parts" (*Ep. xxvii*).

<sup>2</sup> This does not mean that it is a *section* of *Deus*, or even "*Deus* qualified" (B., p. 437).



and proper to the human body and to any external bodies by which it is affected",<sup>1</sup> and "adequate knowledge of the eternal and infinite essence of *Deus*".<sup>2</sup> Our ability to deduce finite singulars from *Natura* is limited by our finiteness, it extends only so far as our "*quatenus*"; nevertheless it is only limited, not negated, for a real finite must be a finite-infinite, and (as Descartes saw clearly enough in the case of thinking)<sup>3</sup> our agency establishes our reality, as its finiteness and degradation to *conatus* establishes our remote derivativity. The principle may be generalized: every finite agent is a remote derivative of that "ample" divine nature from which there follow "infinite things in infinite ways, i.e. everything conceivable by infinite intellect".<sup>4</sup> The deduction of finite singulars corresponds to a real generation, equally of conceptions, of things, and of every other type of expression. This indicates the sense in which *Natura* can be called the *causa remota*<sup>5</sup> (*oorzaak laatste*)<sup>6</sup> of finite singulars: each is connected through an eternal series of proximate producing causes or *alia* to the ultimate or primary and original *aliud* of the mode *qua* mode, viz. Substance.<sup>7</sup> The temporal sequence of transeunt causes that holds the field in the world of *Imaginatio* is real and effective only in its derivation from this immanent hierarchy, and its temporality is nothing more than an *auxilio imaginacionis* in arranging its mutilated content in a degraded projection of the eternal order of essences. Even the *aliud* of the finite mode operates as immanent producer, and appears as external and transeunt only for *Imaginatio*. All real causes are adequate in their causality: inadequacy is an appearance derived from the mutilation or unrecognized partiality of the overt "cause". To take pure transeuncy as a prior can have no other result than Humian scepticism; but the transeuncy of "the common order of nature", with its unintelligible external determinations,<sup>8</sup> can be emended under the *schema* of hierarchical productivity, to the immanence of the "order of the intellect" by which "the mind is able to perceive things through their first causes",<sup>9</sup> and thus to act<sup>10</sup> and to achieve freedom.<sup>11</sup>

<sup>1</sup> *Eth. II, xxxix.*<sup>2</sup> *Eth. II, xlvii.*<sup>3</sup> "*Sum cogitans*"; but this is only a psychologically and epistemologically limited form of the general metaphysical principle: *est agens*.<sup>4</sup> *Eth. I, xi; xvi; App.*<sup>5</sup> *Eth. I, xxviii, Sch.*<sup>6</sup> *Korte Verhand., I, iii.*<sup>7</sup> And God is the cause of all things in the same sense in which he is *causa sui* (*Eth. I, xxv, Sch.*), i.e. an immanent generating cause. It is thus that the finite singular is *Deus quatenus*.<sup>8</sup> *Eth. II, xxix, Sch.*<sup>9</sup> *Eth. II, xviii, Sch.*<sup>10</sup> *Eth. III, Def. ii.*<sup>11</sup> *Eth. V, x.*

(iii.) It is pertinent also to remember the characteristic difficulties to which the uncritical acceptance of time as a prior, and serial "natural" causation as an ultimate dynamical principle, have always led. I have already referred to Berkeley's distinction between real causation or agency and the relation of "sign and thing signified" that passes as causation among sequent phenomena; but Berkeley seems not to have realized that "agency" itself, interpreted as sequence in time of action and result, is open to the same difficulties as arise when we take the "sign" as affecting the "thing signified"; *e.g.* the impossibility of conceiving *how* the cause produces the reputed effect. Hume noticed this fundamental difficulty, but concentrated his attention more directly on the prior question *whether* the antecedent produces its uniform successor. His conclusion was that since by the closest inspection no link of necessity could be discerned between them, not even where the antecedent was an act of will and the successor the willed action, causation could be no more than a subjective addition derived from the activity of "the imagination", or, at most, a relation that eludes critical reflection and is apprehended only through feeling or some sort of unintelligible psychological evidence.<sup>1</sup>

Similar difficulties have always haunted the causal theories of empiricist-writers, for spatial contiguity and temporal succession cannot, without the surreptitious or overt introduction of some agency-factor, be made to yield a genuinely causal relation. The antecedent and the sequent must, as such, be separated from each other, and thus be distinct and disconnected; and however short the space and the interval may be taken to be this disconnexion remains, and their disjunction baffles the search for an intelligible relation of essences.<sup>2</sup> Attempt has sometimes been made to avoid this *impasse* by reducing the spatio-temporal interval to an ideal limit, the cause lying on one side of a "mathematical line" and the effect on the other. In this way it has been thought that we can at once isolate the pure cause and its immediate unalloyed effect, and thus render their causal relation intelligible. Unfortunately, however, the attainment of this spatio-temporal approximation involves also the

<sup>1</sup> I am, of course, indebted for the alternative to Professor Kemp Smith's valuable analysis (*cf.* his *The Philosophy of David Hume*, chs. xvi-xviii, App.). But if this was indeed Hume's view it must be regretted that he did not draw the obvious conclusion but made of the matter a psychological mystery.

<sup>2</sup> The prime error is the search for an *objective* factor of connexion. Causality is agency which as such presents no additional content for objective contemplation.

qualitative identity of cause and effect, so that "natural" causation is simultaneously eliminated.<sup>1</sup>

The fact is that the defence of "natural" causation involves two contradictory requirements: the elimination of the spatio-temporal separation of cause and effect, and the maintenance of their qualitative distinctness. The antecedent that *must* produce its immediate successor is qualitatively identical with it because they are spatio-temporally coincident.<sup>2</sup> Evidently, the analysis, concerned as it is exclusively with temporal events, fails precisely because the *agency* that is the essential factor of causation finds no place along the temporal series. It has been eliminated *ex hypothesi*. According to Professor Kemp Smith,<sup>3</sup> Hume attempted to import it from some unintelligible psychological source that eludes rational reflection: if by this we could understand that causation is not a relation of spatio-temporal contingents and sequents at all but an irruption upon the phenomenal series along a new "dimension" (if the misleading analogy may be permitted) then Hume would not be so far from Spinoza as has commonly been supposed. But we know that this was not Hume's view, for clearly<sup>4</sup> he entertains the idea that antecedent and sequent *are* causally related, and that the causality, though unintelligible to us, is authentic, is "believable", through a sort of intellectually unjustifiable imputation derived from our feeling of necessitation which is produced by the custom instituted by uniform experience.<sup>5</sup> Spinoza's

<sup>1</sup> Similar factors govern the vulgar "explanation" of the "plurality of causes". To take the hackneyed examples: it is said that though there seem to be several distinct causes of "death" or of "heat" in general, yet if you specialize the effect, each *kind* of death has its own unambiguous cause, if you analyse the cause, you will find a common factor that is the immediate source of heat. The essential cause of death or of heat operates over a breadthless interval of space-time and is always the same. But what are these essential causes? Death by poison or by drowning, production of heat by friction or by chemical action, we seem to understand, but the causes that *immediately* precede these effects, and are separated from them by a space and time "ever so short", do not seem to be distinct from the effects themselves. The qualities on opposite sides of a mathematical section are identical. "Cessation of vital functions", "motion of molecules", are not *causes* of death or of heat respectively but attempted *definitions*.

<sup>2</sup> Because they lie on either side of a mathematical section of a metric space and time. Whether the coincidence remains in an *empirical* space-time (*i.e.* extension-duration) is another matter, and here *nihil ad rem*.

<sup>3</sup> *Loc. cit.*

<sup>4</sup> That is, if Professor Kemp Smith's exposition is as true as it is masterly; otherwise the more usual sceptical view of causation would have to be attributed.

<sup>5</sup> *Op. cit.*, p. 392.

inference is quite different and would, I suppose, have been condemned to the flames by Hume as only "school metaphysics". Recognizing that pure agency is nowhere to be found among the confused and fragmentary objects of *Imaginatio* he assigned it to eternal *res in se* as the nature or source of their existence and essence in relation to which the so-called "causes" and "effects" of "the common order of nature" are no more than a *rudis indigestaque moles* of broken and scattered effects, and as such devoid of causal efficacy. Only when they have been redigested and creatively synthesized as metaphysical derivatives of eternal action can their durational causality be discovered. The time-series itself is by this process resolved into its eternal factors as a remote derivative of the eternal causal process, and not as governing it. The agency that we find in "the common order of nature" is undoubtedly (as Hume rightly suspected) derived from some source other than that order or sequence. He was right, too, in looking to the subject as its source, though not to an unreflective "imagination". For Spinoza it is this that is the source of the ineffectiveness of the perceptual world: its causality, such as it is, is rather to be traced to its derivation from *Natura* through the well-nigh inextricable confusion that issues from contentment with the relativity of a finite perspective taken as absolute. Doubtless, also, it is because we are eternal active finites ourselves that we are interested in tracing causality at all, because we "feel and experience" our own agency limited by the agency of what is other than the self. But the agency can only be rendered intelligible, and purged from its impoverishing temporality when the *ordo ad intellectum* has been restored, and the "make of the whole universe" revealed as a hierarchy of immanent causes whose sequence is eternal.

Further, it is to be noted that the causes in *Natura* are, one and all, singulars and not abstract *species*, so that the analysis instituted by Spinoza extends further than that of phenomenalist logic. For the latter the cause of any singular event involves a whole mass of simultaneous antecedent events which, even if it is restricted to those which are (in A. J. Balfour's locution) "relevant", must remain indefinitely complicated, and thus beyond human competence. As a result "natural" causation remains abstract, referring only to the *typical* causes of *typical* effects—a fact that must never be overlooked in the estimation of empirical causal theory.<sup>1</sup> Spinozistic cause, on the contrary,

<sup>1</sup> But which frequently is overlooked by those who imagine knowledge as starting from "particular" facts or empirical *data* and proceeding to

is essentially concerned with eternal singulars, from the original *causa sui* down to the remote finite singulars of "the common order of nature" which in their inseity are all eternal, though in their appearance for sense-perception, such as it is, the part that is eternal in each is occulted by the disordered mass of "imaginative" content that gives them their specious importance as the *data* of empiricistic theory. Genuine reality means agency, whether original or derived, and the reality of finite singulars is the effectiveness that they derive from their remote but eternal connexion with *Natura naturans*. In so far as they are real they are "properties" entailed by the "essence" of *Substantia*, though for human intelligence, limited as it is by its finiteness and relative alienation from the total deductive process, they can at best appear as no more than "unseparated accidents",<sup>1</sup> and at worst as independent reals.

Spinoza's attitude to "natural" causation is thus directly governed by his attitude to time, *i.e.* to the quantified or extended metric time in which *Imaginatio* orders its content.<sup>2</sup> "Events" are more truly to be regarded as a series of effects, confusedly intermixed, than of causes; for events are *facta*, things done, and not as such things possessing a capacity for doing. The causality is derived along a new "dimension": that of eternal agency—the agency of the "self" or of the "other", or more often both, *i.e.* ultimately of *Natura*—and it appears in the temporal series only by imputation. Nor is the series of confused temporal effects to be regarded as the result of a corresponding series of agent-causes (for that would be to confuse eternity with time—nay, even to place it in time), but as the "flotsam, jetsam, and lagan" retrieved from that shipwreck of the intellect on the rocks of finiteness that Spinoza calls "*Imaginatio*".

principles and theories. But an "empirical fact" is not a singular but an instance, a "what" whose "that" is extrinsic, repetitive, dubious; whereas the only sure basis of knowledge is a "fact" whose "what" is identical with its "that", *viz.* the *causa sui* whose existence is one with its essence.

<sup>1</sup> The "essence", "properties", and "accidents" of *Natura* are, of course, not abstract universals but singulars, being derived by genetic agency and not by abstraction, subsumption, or "implicatory linkages".

<sup>2</sup> *I.e.* sophisticated Imagination which in the effort after clarity reads the durational existence of *naïve* Imagination as spread out in a metric time for which the future, and even the present, are imaged *sub specie præteriti* as if standing ready for occupation as the past stands occupied. Thus *Imaginatio* temporalizes itself under "a neutral order of externality" (*Aeternitas*, pp. 30-31 *et passim*), doubly remote from the living duration that characterizes its original *datum*, for this is neither spread out nor neutral but vital and directional.

That order can be assigned to it need not be denied, but its order is not an intelligible causal order but only an imputable uniformity of sequence, not among true singulars but among instances of abstract types of event. We find in it the order that we read into it.<sup>1</sup> For even uniformity is imputed to *prima facie* nature and not directly found in it. The vulgar *species* that form the basis of the commonsense recognition of phenomenal objects do not often possess a uniform serial relation, and classificatory science consists in the refashioning of *species* under the assumption of uniformity. The conduct of the scientist determining (*e.g.*) the definition of a chemical element is not in principle different from that of a child who learns that the black animal that bleats is not a dog but a sheep. The correction is made under the surveillance of the very principle of uniformity that is supposed to be discovered in nature. This has been imputed, and belongs to the "rationalized" world of science and not to the *prima facie* world of common perception in any very marked degree,—still less to the sense-data into which it is supposed to be analysable. Science is in this respect the "rationalization"<sup>2</sup> of phenomena under the principle of uniformity or consistency, but its object is not "the common order of nature" as a simultaneous and serial mass of objects and events, for these, as *per impossibile* such, could present no uniformity of recurrence, for *they do not recur*; nor is it the order of *prima facie* instances of commonsense types of object or event, for this is largely disorder; it is a world of instances of scientific types of object or event, a world, as I say, refashioned under the assumption of uniformity and consistency. It is, in fact, a *mundus rationis* ordered under the *schema* of *genus-species-instance* abstraction, and not a *mundus realis* of singulars self-ordered through the principle of real production or causality. Abstract universals are *entia imaginationis*, and however clear and definite in abstract definition, when taken as real, *i.e.* as singulars, are no more than "generic images".

Thus the whole exposition of temporal causes and uniformities is at bottom only a codification of temporal phenomena taken as "done" under the *schema* of the Aristotelean predicables.

<sup>1</sup> Cf. *Eth. I, App.*: "Because those who do not understand Nature affirm nothing about things, but only imagine them, and take the imagination to be understanding; they therefore, ignorant of things and their nature, firmly believe an order to be in things", that is, as the context shows, "the common order of nature" that bears reference only to the facilitation of imagination and memory. He is not denying that things are subject to the *ordo ad intellectum*.

<sup>2</sup> I am here using the word even in the psychologist's sense.

That this is possible at all may be a fact the importance of which must not be depreciated: what must be denied is that it is directly concerned with causation as such, *i.e.* with production or genuine agency which transcends the field of *Imaginatio* and governs it.

It is not without interest in this connexion to note the tendency of scientific investigation to move away from empiricistic inquiries into so-called "causal" sequences such as occupied the attention of a logician such as J. S. Mill, towards the elaboration of mathematical functions and equations governing temporal processes, not as temporal but viewed *sub specie aeternitatis*; *i.e.* towards rendering the order of nature intelligible. Electro-magnetic theory may as a matter of history have started from empirical facts such as that the loadstone attracts iron and that the motion of a conductor in a magnetic field generates electricity, but it is of a quite different intellectual order. It is not primarily concerned with "causal" sequences at all but with the timeless character of electro-magnetic phenomena as such. It seeks the intellectual "*formulae*" that correspond with, or express, the real natures (*formae*) of all such phenomena; it is, as Bacon would have said, concerned with "forms" and not with "efficients".<sup>1</sup> But Spinoza is under no illusion about the simplicity of proceeding from "form" to "efficient" (or, as he might say, from immanent efficient to transeunt inefficient): it is no mere application of general principles to instances; the *real* structure of the universe is not that of *genera, species*, and instances (which is by nature unproductive), but that of a hierarchy of original and derived agents; and the "common order of nature" no mere concretion of universals, but a declension from "intellectual order" to *Imaginatio* consequent upon the partiality and confusion of the relativized human perspective of the Real. Mathematical physicists have made a beginning in the emendation of finite perspectives, but spatio-temporal relativity does not exhaust the qualitative corrigibility of the phenomenal world. Indeed, the most difficult part of the work remains to be done, though it is my contention that Spinoza has provided the metaphysical principles that must govern the "general metaphysical theory of relativity".<sup>2</sup>

<sup>1</sup> Spinoza's "efficient cause", it must be noted, is not that of Bacon: not the temporal antecedent; indeed, it corresponds more nearly with Bacon's "formal cause", *i.e.* "the law of action".

<sup>2</sup> I must guard myself against the supposition that I take spatio-temporal relativity to be no more than a special case of philosophical "relativity"



(iv.) I turn, finally, from these somewhat anachronistic negative reflections on the ineffectiveness of "natural" causation, to the positive principles governing the Spinozistic deduction of the temporal sequence of objects and events from the eternal hierarchy of agency. First among these must be that of the partial degradation of the agency of a finite singular to durational *conatus*. The finite mode is not a detachable piece of *Natura* (which is "infinite, one, and indivisible") but a microcosm that is at once a part of the macrocosm standing in relation with its complementary "other", and a causally derived, and therefore impoverished, reproduction of it. In *Aeternitas*<sup>1</sup> I attempted a symbolic analogy of its content and status which was, I think, as successful as it was intended to be—for I was under no illusion about the value of such expressions in philosophical research. I have also made use of the term "finite-infinite" to indicate the character of the microcosm: for it is "finite" as partial yet "infinite" as singular; and it is able to combine the two characters because its finiteness is qualified by its relation with its "other" that constitutes its "field" of endeavour, and its infinity by the relative ineffectiveness of its causal essence or agency. The process from the infinite to the finite involves the dwindling of part of the total agency to durational *conatus*, part remaining as eternal *actio* truncated in proportion to the remoteness of the finite derivative in the causal hierarchy. Under *Cogitatio* the former part is naive (and therefore inerrant) *Imaginatio*, and the latter *Scientia*. Under *Extensio* the former is the "actual human body" enduring and striving in an environment that is at once its "field" of action and its limiting "other"; the latter the

or subjectivism. On the contrary, I do not think that it has any important relation with the contention of subjectivists that the Real is mental. Nor do I think that "the work remaining to be done" lies in this direction. As I have so often contended: the reality of the extra-mental world is its alien *agency* and not its objective appearance. And this, I am sure, is the view of Spinoza who was no subjectivist. Indeed, I have suggested that he may have gone too far in the realist direction when he made *Extensio* an Attribute of Substance (cf. "Knowledge, Reality, and Objectivity", *MIND*, XLIX, N.S., p. 329 (-331), note 1). But perhaps we should say that, like God's intellect and man's, *Extensio* differs from space as the Dogstar from the animal that barks! Such a view would be thoroughly Spinozistic, and in accord with the definition of *Attributum* (*Eth. I, Def. iv*), "*intellectus*" covering both infinite and finite intellect: the former understanding the identity of all the Attributes with *Substantia*, and the latter imputing identity to Attributes empirically derived as "absolutely other".

<sup>1</sup> Pp. 209-213. Cf. also pp. 121-127.

human body as *Extensio quatenus* and thus derivatively identical with its "other".<sup>1</sup>

Now, "the common order of nature" is derived from the world of naive, inerrant, but not inerrable, *Imaginatio*.<sup>2</sup> This gives place to the world of sophisticated or "rationalized" *Imaginatio*,—a construction based upon the immediate actuality of durational *conatus* when this is taken as original or *datum*, and speciously clarified under the common *auxilia imaginatiois*: time, measure, and number.<sup>3</sup> In itself durational *conatus* is not a temporal sequence of dated efforts but impoverished agency, *actio sub quadam specie quantitatis concepta*—action with "one foot in the air", an urge partially unsatisfied but unquenched, the "after-image" (so to say) of the complementary superabundance of the macrocosm in the microcosm.<sup>4</sup> Not content with the intellectual vagueness that must infect an object that is by nature vague (for the finite reproduction of the infinite cannot but exhibit a microcosmic "*nimbus*") *Imaginatio*, taking the clarity of *Scientia* to be its birthright, distributes its accomplished actuality along a dated "past", and its unquenched potency along a dated "future", with its urge impinging on the time-series at the point of juncture of past and future.

The relation of duration to time on the one hand and to eternity on the other has always been a source of difficulty to students of Spinoza, for though eternity and time are sharply contrasted by him, duration is closely related to both. Eternity and duration are both modes of existence: the former being an "infinite existence",<sup>5</sup> and the latter "the indefinite continuance of existence"<sup>6</sup> "abstractly conceived as if it were quantitative".<sup>7</sup> And plainly it is this quantitative character of duration that is the basis of its relation to time, which is its measure. Thus the contrast of eternity and time is consistent with their relation to duration only by reason of a certain ambiguity in the nature

<sup>1</sup> This indicates the real significance of Spinoza's assertion that "the object of the human mind is the body *et nihil aliud*" (*Eth. II, xiii*).

<sup>2</sup> "Imaginations . . . are not opposed to the truth, nor do they disappear with the presence of truth" (*Eth. IV, i, Sch.*). "Error does not lie solely in *Imaginatio*" (*Eth. II, xxxv, Sch.*).

<sup>3</sup> *Ep. xii*.

<sup>4</sup> We cannot say, as Spinoza does of eternity, that in duration there is no when, before, and after, for it is vaguely quantitative; but we must, I think, say that these are present only *sub specie conatus* as actual strife, achievement, and potency which, though under reflection vaguely serial, are united as "moments" of naive endeavour.

<sup>5</sup> *Cog. Met., II, i*.

<sup>6</sup> *Eth. II, Def. v*.

<sup>7</sup> *Eth. II, xlv, Sch.*

of duration. And this is no mere ambiguity in the use of the word "duration" but is native to the thing itself; for duration is an object of naive *Imaginatio*, and as such it cannot be intellectually clarified. The attempt to do this by the imposition of temporal measures is no more than a sophistication of *Imaginatio*. Abstractly to assimilate duration to eternity as a mode of existence is only to transfer its native ambiguity to its *differentia* where it remains ineluctable. But this does not mean that duration has no place in an intelligible theory of the universe, though it does mean that its place is in some sense subordinate. Infected with relativity it falls short of the full reality of intelligibles. If, avoiding abstraction, we take both duration and eternity as modes of agency, their relation can be authenticated. Eternal agency is unfrustrated creation where the effect follows from the cause alone (*i.e.* the *adequate* cause); durational *conatus* is impeded or canalized production where the effect follows from a co-operation of "internal" and "external" causes, *i.e.* causes that are native to and alien from the agent that apprehends existence as duration, and whose causation is thus *inadequate*. Here creativity is dispersed as *conatus*, and its effects are subject to an order not arising from its sole agency but partly imposed upon it by relation with its "other". Thus the unintelligibility of duration is a verification of its deduction and the pledge of its relative reality or authenticity. For it is no ineluctable "hard" entity but a mode of existence relative to the finite singular, which relativity is corrected in an ampler synthesis. Viewed from the standpoint of the hierarchical unity of "self" and "other", duration is elevated to eternity, and potency to reality. Only for the abstracted "self" is action reduced to *conatus* with its contrast of achievement and potency within an environing "other", though in this perspective the reading is fully authentic, and, indeed, essential.<sup>1</sup> Metaphysical error begins when we proceed

<sup>1</sup> The same principles indicate the root of the eternity of the finite singular: in relation to its own adequate causation of subordinate modes it possesses a range of eternal action in virtue of which it is incorrigibly and indubitably, though derivatively, real—which is, as I have said, the metaphysical root of the Cartesian *cogito*. The thinker knows indubitably that he exists in the very action of thinking, for reality is agency. Similarly he knows his action to be limited and thus derived, and thus that an Agent exists from which he is derived. Its agency is its reality. The argument can be extended to cover the reality of the body and "external" things: in so far as we are assured of their agency, as distinct from their objective appearances we thereby know that they are real. Doubt only concerns the relation of objectivity to action.

to "rationalize" and speciously to clarify durational *conatus* as a dated past of successive accomplishments flowing from an actual present of agency. The dated future of supposed potency is a further construction in which the future *qua* future is read *sub specie praeteriti* as if what might be accomplished had already in prospect been actualized. So the time-series is imagined as a qualitatively uniform dimension along which a moving present of agency proceeds. But in truth only the "present" is real, i.e. active, and as such it is not a moment of time, either "punctual" or "specious", but a derived and impoverished eternity.<sup>1</sup>

Further, because its endeavour is always in relation with the limiting or co-operating counter-endeavour of an "other", each dated accomplishment of the "self" is imagined as related to an "object" taken as wholly "other",<sup>2</sup> whereas in truth both the accomplishment and the object ought to be attributed to the co-operation of "self" and "other" as allies or opponents or both. Thus the very errors of *Imaginatio* result from its rightful effort after clarity—its essential failure being due to the acceptance of the finite perspective, and especially its vivid conational "*nimbus*", as inerrable *datum* capable of being intellectually construed *without metaphysical transcendence*. This is the quintessential error of empiricism with which metaphysics can make no compromise. *Imaginatio* is pseudo-

<sup>1</sup>The same principles may explain the otherwise inexplicable, but ineradicable, empirical factor of "memory" which Spinoza always connects with *Imaginatio*. For it is the rationalization of *Imaginatio* that places objects and events in a past.

<sup>2</sup>And "at a distance". For distance from the objective "self" is the appearance *tanquam quaedam species quantitatis* of the limitation of the agency of the real "self" by an "other" which is imagined as an object at a distance. Space-time would thus seem to be the quantitative perspective of infinite and eternal agency infected with metaphysical relativity under reference to a finite derivative. How far this analogy of duration and extension entails the pseudo-reality of the latter I will not discuss in a footnote. I have elsewhere suggested that for Spinoza *Extensio* is no more extended than eternity is continuant (but only duration), though distance is. But even so, the analogy is between duration and extension and not between time and space. Temporalized duration is analogous to measured distance, with the added disqualification that it is directional (cf. *Aeternitas*, pp. 7-9); and it is this, perhaps that permits Spinoza to make *Extensio* an Attribute but not duration—not even when it is taken as indefinitely prolonged. The place assigned to "*motus et quies*" in *Natura naturata* suggests that *Extensio* was conceived as infinite "physical" agency, and not *tanquam quaedam species quantitatis*, though Spinoza may still have retained some trace of the "vulgar error" that agency is an abstraction apart from *objects* that act.

cognizance of a pseudo-real, and genuine cognizance is attained not by the independent clarification of this pseudo-real but by laying bare its metaphysical derivation through the hierarchy of reals: that is, by the "emendation", not the "rationalization", of the actual intellect; the correction of its relativity as *datum*. Though "man's place in nature" does not disqualify him as the recipient of inerrable *data*, it does infect those *data* with metaphysical relativity, so that they resist clarification without transcendence and form no independent basis for positivistic analysis and construction. Indeed, *is not this entailed by their inerrability?* If man is to attain real cognizance he must, therefore, be able to transcend his partiality and gain insight into its nature and the principles governing the metaphysical relativity that infects his empirical intuition. He must be able to "generalize" his native "axes of reference" by metaphysical transcendence. This is possible because partiality is not his sole character in relation to *Natura*: he is not "section" but microcosm, and the "general metaphysical theory of relativity" is based upon the elaboration of the relations of microcosm and macrocosm. I will not attempt here to decide whether man's knowledge that he is a microcosm is "empirical" or not—that is largely a question of the significance of the term. Plainly, he cannot discover it by "staring" at sense-*data*, or limiting himself to their "analysis" or "construction". His analysis must be directed towards his own microcosmic character, and the construction must involve metaphysical transcendence. Spinoza gives no distinct clue to the process by which he discovered the microcosmicity of the finite singular: the suggestion was almost certainly historical, for the conception already had a long history in relation to the cognizing human *mind* in its relation with nature as its *object*; and doubtless his own theory of knowledge led to the re-orientation of the theory peculiar to his philosophy, whereby the human mind is the microcosm of the "*infinita idea Dei*", and the human body the microcosm of the "*facies totius universi*". As I have elsewhere shown,<sup>1</sup> examination of the physical processes involved in sense-perception points in the same direction, though the inference must here be inductive, especially for those who, like myself, assert (on the assumption of microcosmicity) that sense-perception is a dubious guide.

<sup>1</sup> "Knowledge, Reality, and Objectivity" (MIND, XLIX, N.S., pp. 170-188, 303-332). Cf. also "The Roots of Duality in Human Knowledge" (Proc. Arist. Soc., 1937-38, pp. 168-188); "On Things in Themselves" (Philosophy, XIV, pp. 155-179).

More conclusive, but less available, is the intuited relation of the finite mind as genuine agent with its creative source, as roughly adumbrated in the Cartesian theory of the indubitable *cogito* and its relation to the *ens summe perfectum*; and this is probably the root of Spinoza's own conviction rather than the "*ex auditu*"<sup>1</sup> evidence of philosophical history.<sup>2</sup> But even if the principle were reduced to the status of an hypothesis to be verified by the success of its application in resolving the difficulties of radical empiricism its position would not be contemptible; though I am clear that Spinoza did not so regard it. But whatever its source and evidence in the mind of Spinoza, it is undoubtedly an essential root of his theory of causality as also of his theories of knowledge,<sup>3</sup> of morality, and of religion.

<sup>1</sup> *De Intell. Emend.*, § 19.

<sup>2</sup> Cf. also *Aeternitas*, p. 89 (-91), note 1, for the relation of *Ratio* to this metaphysical schema.

<sup>3</sup> How else can such seemingly contradictory propositions as *Eth. II*, *xiii*, *xiii Sch.*, *xvi*, *xix*, *et xlvii* be construed except by assuming that Spinoza himself "*garriebat, ne dicam insanibat*"?

(To be continued.)

#### IV.—DISCUSSION.

##### A REPLY TO PROFESSOR COLLINGWOOD'S ATTACK ON PSYCHOLOGY.

###### I

IN his recent book, *An Essay on Metaphysics*, Prof. R. G. Collingwood attacks psychology. This attack is more than the philosophic criticism which psychologists have come to expect from some philosophers; it is virtually an attack on their good faith. Psychologists, according to Prof. Collingwood, are not merely "neglecting the canons of scientific thought", but "they are more or less consciously defying them".<sup>1</sup> They are endeavouring to show that the distinction between truth and falsehood is "antiquated lumber": they are teaching "that there is no difference between the pursuit of truth or science, and the pursuit of falsehood, or sophistry".<sup>2</sup> They are "irrationalist agents", who cynically conceal their true aim, which is to destroy a civilisation based on reason, "in order to bring into existence a form of human life in which all the determining factors should be emotional".<sup>3</sup> This attack of Prof. Collingwood demands a reply; not because any arguments that Prof. Collingwood puts forward are new or important, but because Prof. Collingwood holds an influential position in the philosophical world, because the acceptance of his views would impede the already belated recognition of psychology in some British universities, and because, in a country where, according to Prof. Collingwood, "historians, scholars, artists, and art critics, lawyers, politicians" view psychology with "open scorn", a book like *An Essay on Metaphysics* is likely to strengthen this prejudice.

Prof. Collingwood bases his attack on psychology on two main grounds: first, an examination of the works of accredited teachers of psychology shows that they are deliberately neglecting, indeed defying, the established canons of scientific thought; second, psychology, which might legitimately claim to be "the science of feeling", pretends to be "the science of thought", and this mistaken notion of its true subject-matter is the root of all its subsequent misdemeanours. We must first examine Prof. Collingwood's contentions under these two headings; after this we may profitably pass to the consideration of certain rather curious features of Prof. Collingwood's own doctrines.

<sup>1</sup> *An Essay on Metaphysics*, p. 119. Page references, unless otherwise stated, are to this book.

<sup>2</sup> P. 120.

<sup>3</sup> P. 83.



## II

In support of his first contention, that psychologists defy the canons of scientific thought, Prof. Collingwood examines "three characteristic passages from books intended by their authors and treated by their readers as text books, the authors being accredited teachers of psychology, and the passages characteristic of what their pupils are expected to learn".<sup>1</sup>

The first passage is from McDougall's *Outline of Psychology* and is a discussion of animal learning by the "method of trial and error", illustrated by Thorndike's experiments on cats. Prof. Collingwood's criticism of McDougall is, in outline, as follows:—

1. McDougall does not define the phrase trial and error, therefore it must be taken in its everyday meaning;
2. In its everyday meaning trial and error is a method of deliberate experimentation involving five stages—
  - (a) framing a certain hypothesis,
  - (b) asking whether it is true or false,
  - (c) performing an action deliberately designed to test it,
  - (d) if the test fails, inferring that the hypothesis was an error,
  - (e) beginning again with a different hypothesis;
3. The behaviour of Thorndike's cats, which McDougall takes as an illustration of trial and error learning, resembles that of a man under the influence of panic fear and incapable of thinking;
4. Therefore McDougall is trying to prove that the scientific testing of hypotheses is identical with panic behaviour, that "what is called thinking is a random scratching and clawing about".<sup>2</sup>

Prof. Collingwood considers this as "an example of red herrings", which he defines as "the pretence of discussing a topic belonging to the field with which it professes to deal, while in fact discussing a different topic not belonging to that field".<sup>3</sup> In the present case McDougall is pretending, according to Prof. Collingwood, to be discussing the method of trial and error as defined under point 2 above, when in fact he is discussing random or panic behaviour. But is McDougall pretending to discuss trial and error in the sense which Prof. Collingwood gives to this term? Of course, he is not. The term "trial and error", when used with reference to learning, has no such meaning or implication. It is a technical term, consecrated by long usage among psychologists, and it should have occurred to Prof. Collingwood, the philosopher of history, to look up its historical antecedents. The term "trial and error" was first introduced into psychology by Lloyd Morgan in his book *Animal Life and Intelligence* (1894).<sup>4</sup> Lloyd Morgan makes a clear distinction

<sup>1</sup> P. 119.<sup>2</sup> P. 126.<sup>3</sup> P. 122.<sup>4</sup> I am aware that the term was used before this by Bain, but Bain was not an experimentalist and used the term in rather a different way.

between trial and error behaviour and rational behaviour. Referring to the human being behaving rationally, Lloyd Morgan writes "he has a plan or scheme which he puts into execution. And if it fails, he is not content until he has found out wherein the failure lay. This enables him to form a better scheme."<sup>1</sup> Clearly what Prof. Collingwood terms "trial and error" behaviour is identical with what Lloyd Morgan terms rational behaviour, and this behaviour is distinguished from the random behaviour, which psychologists since Lloyd Morgan's time have agreed to label "trial and error". Prof. Collingwood is, therefore, simply ignoring the technical meaning and limitations of the term "trial and error". Psychologists, when they speak of "trial and error", do not profess to be dealing with rational behaviour, and McDougall himself in the very chapter of the very book from which Prof. Collingwood quotes, makes this quite clear.<sup>2</sup> This confusion on the part of Prof. Collingwood would have been inexcusable had his *Essay on Metaphysics* been written in normal circumstances. But since the book was written on a sea voyage, where apparently the Professor had few books of reference apart from *The Marine Steam Engine* by Sennett and Oram, ed. iii (1898), and few critics apart from Mijneer, whose captain's bridge he shared, we should perhaps take a charitable view, and only ask that next time he goes a sea voyage Prof. Collingwood should, with his doctor's permission, angle for more nourishing fish than imaginary red herrings in the works of psychologists. But I cannot help adding that this whole passage in the *Essay* strikes me as an excellent illustration of what Prof. Collingwood refers to in another connexion as "the length to which a hostile reader will go in order to satisfy the desire to make out, that his author is talking nonsense".<sup>3</sup>

Prof. Collingwood's second example is taken from Spearman's *The Nature of Intelligence and the Principles of Cognition*. In this book are two quantitative laws which run as follows :—

1. The principle of retentivity ; "the occurrence of any cognitive event produces a tendency for it to occur afterwards" ;
2. The principle of fatigue ; "the occurrence of any cognitive event produces a tendency opposed to its occurring afterwards" .

This "example of self-contradiction" drives Prof. Collingwood into a frenzy of excitement. Psychology shows itself as "a conscious and confessed fraud" that has "become so cynical as to abandon even the pretence of offering a consistent statement on a point under discussion".<sup>4</sup> Yet unfortunately for Prof. Collingwood these principles of Spearman are, *both* of them, accurate statements of fact, and what is more, any student who had carried out a year's elementary work in experimental psychology would

<sup>1</sup> Lloyd Morgan, *Animal Behaviour*, p. 139.

<sup>2</sup> McDougall, *Outline of Psychology*, chap. vi.

<sup>3</sup> P. 160.

<sup>4</sup> P. 127.

know this. When any cognitive event is repeated both these tendencies are brought into play, and the curve of performance is largely a resultant of these two opposite forces. At first the principle of retentivity is stronger than the principle of fatigue and the curve of performance shows a tendency to rise. But with further repetitions the principle of fatigue begins to outweigh the principle of retentivity and the curve of performance begins to fall. No verbal dialectics on Prof. Collingwood's part can upset these well-established facts, and I can only ask Prof. Collingwood to show sufficient scientific humility to go round to a psychological laboratory and, under expert guidance, to spend a few hours in having them demonstrated to him. Logically, I suppose, the matter can be explained as follows. A cognitive event is an event taking place in the highly complex field of the organism. What is called for simplicity an event is in fact a complex cluster of events. Because of the complexity of the event itself and of the field in which it is taking place opposing tendencies can quite easily be initiated. In other words, the event E stands for the cluster E1, E2, E3, etc.; E1 gives rise to tendency A, E2 to tendency B, etc. Tendency A, set up in one part of the complex organism has one effect on the recurrence of further events of type E; tendency B, set up in another part of the complex organism, has an opposite effect on the recurrence of further events of type E. In the instance in question the facilitating tendency is probably a nervous change, the retarding tendency probably a chemical change. But the explanation is less important than the facts, and Prof. Collingwood's diatribe is simply a confession of his ignorance of the facts. It is surely strange that the professed champion of the scientific traditions of European civilisation should show himself guilty of this slick verbalism, instead of going, as a scientist should, into the laboratory and finding out!

The third example of the errors of psychologists is also taken from Spearman. It is an "example of plagiarism". Spearman claims to have corroborated with data obtained under experimental conditions the teaching of Plato, Hume and other writers on the nature of mental impressions. To this Prof. Collingwood says, how futile! If Spearman had shown his predecessors wrong he would have done something; as it is "his researches have left the subject exactly where they found it".<sup>1</sup> Then follows the usual sweeping invective about psychology in its investigation of intellectual processes being able to establish no results whatever, and experimental methods being powerless to confirm anything. But, firstly, is it true that corroboration is entirely futile? Does Prof. Collingwood regard the work of an archæologist as entirely futile when it happens to confirm an historical tradition already believed on other grounds? Does not every piece of corroboration increase the probability of a theory? And is it not for this reason valuable,

<sup>1</sup> P. 129.

particularly when the theory is one about which there has not been general agreement? Secondly, what does Prof. Collingwood mean by "plagiarism"? My dictionary defines it as "adopting, without acknowledgement, the writings of another". As Spearman openly acknowledges that the doctrine in question is found in Plato, Hume and others, I fail to see that Spearman is guilty of "plagiarism". Thirdly, does Prof. Collingwood think that one instance, or even a good many instances, of this kind shows that psychology can contribute nothing new to our understanding of thought processes? It is curious that Prof. Collingwood should select this one particular passage from Spearman's writings, because Spearman is one of the most original psychologists of recent times, and his factorial analysis of human abilities is one of the most important and revolutionary advances ever made in psychology. Had Prof. Collingwood been interested in doing so, he could have filled many pages with original material from Spearman's writings, and that he should select this one particular sample, which it must be remembered he claims as "characteristic" of modern psychology, is surely an indication of his inveterate bias against psychologists.

These, then, are the three passages that Prof. Collingwood quotes as instances of the scientific immorality of psychologists. His arguments fail in every case. I must say that I have rarely come across in the writings of a man of Prof. Collingwood's standing so much sophistry, misconception, and prejudice concentrated in no more than ten pages.

### III

The second, and more general of the main grounds upon which Prof. Collingwood attacks psychology is that what is really "the science of feeling" arrogates to itself the title of "the science of thought". As a "science of feeling" Prof. Collingwood admits that psychology may do good work, and he even speaks of the desirability of encouraging it in every possible way. (I suggest that Prof. Collingwood himself might easily do this by insisting on more adequate recognition and support for the subject in Oxford University.) But "psychology cannot be a science of thought, because the methods it has developed in its history as a science of feeling preclude it from dealing with the problems of criteriology. It has nothing to say about truth or falsehood."<sup>1</sup> Now these contentions of Prof. Collingwood raise the following questions: firstly, can psychology be adequately defined as "the science of feeling"? Secondly, is it true that psychology has no contribution to make to the study of thought?

1. *Psychology as the science of feeling.* In attempting to answer the first of these questions we must begin by asking what Prof. Collingwood means by feeling. He gives no explicit definition of

<sup>1</sup> P. 119.

this term, but it apparently covers "seeing, hearing, touching, smelling, tasting, and experiencing the emotions associated with them".<sup>1</sup> These activities are non-cognitive and non-self-critical. Now this use of the term "feeling" is much wider than would be approved of by most psychologists, but it is still much too narrow to be accepted as an adequate definition of psychology; because there are fields of enquiry to which psychologists have made, and are making, contributions, and which do not obviously fall to any other science, but which could not be classified as belonging to "feeling" even in its broadest connotation. An adequate definition of psychology must cover all the effective special activities of psychologists: the definition suggested by Prof. Collingwood does not. A few instances will make this clear. One of the most important activities of psychologists at the present time is the analysis and measurement of abilities, including what is popularly termed intelligence. Such works as Spearman's *The Abilities of Man*, or Burt's *The Factors of the Mind*, both landmarks in the recent history of psychology, could not by any stretch of the term be said to be dealing only with feeling. Secondly, psychologists have done a great deal of work on memory. There is the early quantitative work; and there is the later qualitative work, such as F. C. Bartlett's *Remembering*. This work, so far from being work of "complete scientific futility",<sup>2</sup> is most illuminating, and has important bearings for social psychology. But I have never yet heard memory described as a sort of feeling! Thirdly, have psychologists contributed nothing to the study of perception? Presumably Prof. Collingwood will allow perception to be a cognitive activity, even if sensations are simply classed as feelings. But psychologists have added to our knowledge of perception by their studies on the organisation of the perceptual fields, on phenomenal regression, on constancy phenomena, on the influences of past experience and of attitude on perception, on the temporal properties of perceptual processes, on the factors influencing perceptual illusions, etc. It is true that there are some more ultimate questions relating to perception which are of a philosophical rather than a psychological nature, but this does not prevent a whole range of perceptual problems coming within the legitimate field of psychology, those problems, namely, upon which light can be thrown by experimental methods. These instances are perhaps sufficient evidence to prove the inadequacy of Prof. Collingwood's definition of psychology as "the science of feeling".

2. *Psychology as the pseudo-science of thought.* Our second question is, is it true that psychology has no contribution to make to the study of thought? According to Prof. Collingwood "psychology has always approached the study of thought with a perfectly clear and conscious determination to ignore the self-critical function of

<sup>1</sup> P. 110.<sup>2</sup> P. 130.

thought".<sup>1</sup> But more than this "if a science of thought has nothing to say about truth and falsehood the omission becomes important. It can only mean that according to this science the distinction between truth and falsehood does not exist."<sup>2</sup> (By which of the canons of logic, that Prof. Collingwood is so concerned to uphold, does this inevitably follow, I wonder?) Hence Prof. Collingwood arrives at the startling conclusion that psychologists are a group of fifth column conspirators, whose real aim is to destroy western civilisation from within, and that they are "doing it with almost perfect unanimity and a considerable degree of success"!

In answer to the more sober points of this criticism I would remark firstly, that psychologists (apart perhaps from behaviourists) do not deny the self-critical function of thought; secondly, that psychology, like all sciences, is an abstract study and leaves out certain features of its subject-matter, but that this does not constitute a denial of the existence of these features; thirdly, that when the self-critical aspects of thought have been relegated to philosophy, there are other aspects of thought that fall within the province of psychology. Any psychologist who claims that his science is the only science that studies thought is certainly wrong; but any philosopher who asserts that psychology has nothing to say about thought is equally certainly wrong.

Firstly, then, psychologists do not deny the self-critical function of thought. I will go no further than the two works from which Prof. Collingwood quotes, McDougall's *Outline of Psychology*, and Spearman's *Nature of Intelligence*. McDougall in his chapter on "Reasoning" writes, "the peculiarity of reasoning . . . is that, by means of it, we attain to true beliefs", and he disposes "of the contention that reasoning is nothing but associative reproduction".<sup>3</sup> For Spearman a fundamental property of what he calls neogenetic processes is that of insight, and he distinguishes these from the "quasi-mechanical" reproductive and associative processes. In his chapter on "Judgement" he specifically deals with error, where, he says, "some bias acts as a substitute for insight". Neither of these authors can, therefore, be justly accused of denying the self-critical functions of thought, nor of maintaining that "the distinction between truth and falsehood does not exist".

Secondly, psychology hands over the study of the formal and criteriological features of thought to the philosopher. But in dismissing them from his science the psychologist is not denying their existence, any more than the anatomist denies the existence of the bodily functions which he leaves to the physiologist, or the chemist denies the reality of the physical properties of matter which he leaves to the physicist. Why should psychology be the only science for which abstraction is illegitimate?

Thirdly, there are other aspects of thought which fall within the

<sup>1</sup> P. 115.

<sup>2</sup> P. 119.

<sup>3</sup> McDougall, *op. cit.*, pp. 401-402.

province of psychology. All human thinking, whether true or false, depends upon conditions. It depends upon physical conditions, for thought is disturbed by extremes of temperature, by oxygen want, by increased concentration of  $\text{CO}_2$  in the atmosphere.<sup>1</sup> It depends upon physiological conditions, for thought is disturbed by disease of the nervous system, by glandular defects, by toxic products in the blood. Finally, it depends upon psychological conditions, for thought is disturbed by neurotic attitudes, by false or inadequate associations, by interests and needs. To these we should perhaps add social conditions; for effective and sustained thinking depends upon a favourable social environment, both material and cultural. No one science can be regarded as *the* science of thought; but among the sciences which can throw light on the course of thinking, psychology is certainly among the most important, for the psychological conditions are in practice among the most fluid and the most disturbing, while the texture, if not the form, of thought is intimately psychological. Moreover, there are certain kinds of thinking, sometimes termed by psychologists "autistic", which fall primarily within the province of psychology, for instance reverie, and the imaginative thinking of the child. Hence the contribution of psychology to the study of thought is an essential and significant one. And strangely enough throughout his *Essay on Metaphysics* Prof. Collingwood really admits this. Which leads us to our final section, an examination of certain features of Prof. Collingwood's own doctrines.

## IV

Metaphysicians frequently maintain, and Prof. Collingwood is at one with his fellow metaphysicians in this, that those who reject metaphysics substitute a bad and unacknowledged metaphysics in its place. The same applies to psychology. Philosophers who reject psychology are frequently guilty of bad psychologising. Prof. Collingwood is no exception. But in his writing the psychologising is so glaring that it is surprising that he himself has not noticed it. For he accounts for the errors of his opponents, the anti-metaphysicians, mainly in psychological terms. So Prof. Collingwood either has to maintain that while he himself is engaging in thinking (a criteriological activity with which psychology has nothing to do), his philosophical opponents are only engaging in "feeling"; or he has to admit that psychology has, after all, a great deal of relevance to thinking. Let us examine what Prof. Collingwood says. He divides anti-metaphysics into two kinds; progressive anti-metaphysics, and reactionary anti-metaphysics. Both are explained psychologically, the former being based in

<sup>1</sup> See Shock, "Some Psychophysiological Relations," *Psychol. Bull.*, vol. 36, 1939.



resentment at the conservatism of metaphysicians, the latter in fear of their progressiveness. Ultimately it appears, "what makes anti-metaphysicians is the thing which modern psychologists, if they belong to Freud's sect call an *Oedipus complex*, and if they belong to Adler's sect an *inferiority complex*".<sup>1</sup> It certainly comes as a shock to the reader of Prof. Collingwood's *Essay*, after he has been told so vehemently that psychology can explain nothing in the intellectual life of man, to find the Professor himself indulging in psychological explanations of such an intellectual activity as philosophising!

Later in the *Essay*, when Prof. Collingwood is dealing with the views of Mr. Ayer, the psychological interpretation is even more marked. Mr. Ayer's work is "the outcome of a desire to belittle what one cannot share, and destroy what one cannot understand".<sup>2</sup> It is suggested that his rejection of ethics and theology is due to resentment at a narrow religious upbringing in the home.<sup>3</sup> Finally, Mr. Ayer and his fellow-positivists are diagnosed as probably suffering from "persecution mania",<sup>4</sup> and said to be "a proper subject of study to the psychopathologist"!<sup>5</sup> Now this is not only psychologising, but it is bad psychologising. These statements may, of course, be true; but Prof. Collingwood does not give, and, I feel fairly certain has not got, a shred of evidence based on a scientific analysis of Mr. Ayer's mind for these allegations.

But the point really is this: Prof. Collingwood is either making the arrogant claim that while he himself is a thinker, his philosophical opponents have not begun to think at all; or he is admitting that thinking does fall to some extent within the province of psychology. I suspect that Prof. Collingwood is taking the first of these lines, because although he is frank enough to describe himself as a "professorial goose", and his job as "cackling";<sup>6</sup> he makes the dangerous claim to be a guardian of the sacred Capitol of civilisation. This claim is dangerous for two reasons: firstly, it may be wrong; the goose, being a goose, cannot know whether it is privileged to dwell on the sacred Capitol, or whether it merely inhabits a back-block farm; in other words, is Prof. Collingwood quite sure that the "absolute presuppositions" towards which he shows "an attitude of unquestioning acceptance"?<sup>7</sup> are the pillars of European civilisation? Secondly, those who believe that they are guarding a sacred heritage of unquestionable value sooner or later stoop to persecuting those who dispute this claim. Attacks such as Prof. Collingwood has made on psychology in his *Essay on Metaphysics* go far beyond the bounds of fair and reasoned criticism, and are the first stage towards that suppression of psychology which has already in some measure taken place in parts of Europe. It is for this reason, and because I believe that the science of psychology has much to contribute to the understanding

<sup>1</sup> P. 89.<sup>2</sup> P. 166.<sup>3</sup> P. 167.<sup>4</sup> P. 168.<sup>5</sup> P. 169.<sup>6</sup> P. 343.<sup>7</sup> P. 173.

of man and society, that it seems to me important that Prof. Collingwood's charges should be answered and exposed.

Psychology at the present day is a vast, complex, and technical science. It is not a subject that can be understood by the amateur who occasionally reads a text-book on the subject or glances at its more startling pamphlets. The only remedy for the ignorance and the misconceptions to be found in Prof. Collingwood's *Essay* is for philosophers to be able to come into contact with vigorous schools of psychology. And this they will only be able to do when English universities have given to psychology that place in their curricula which its importance deserves, and which the universities of all other major countries of the world, including the British Dominions, have long accorded it.

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## V.—CRITICAL NOTICES.

*The Factors of the Mind.* By CYRIL BURT. University of London Press, 1940. Pp. xiv + 509. 21s.

MOST of us are aware that there is a body of theory which deals in 'factors of the mind'. We have heard of the 'verbal factor', a 'general factor', mechanical ability, '*f*' for 'fluency', and so forth. This book is concerned with the thorny topic of factorial analysis, the evidence on which these concepts rest.

It is, indeed, a thorny subject. The mathematician may be scratched by the slender thorns of psychological analysis, while the non-mathematical psychologist certainly feels that he is pushing his way through a veritable bramble bush of symbols and calculations, which he may well find impenetrable.

'Where', he may ask, 'does mathematics end and psychology begin?' And he may be excused for harbouring a suspicion that the mathematician with his talk of 'vectors', 'summation', 'rotation of axes' and the like, is bouncing him into accepting contents of the mind, which have been 'proved' by incontrovertible mathematical evidence, not one word of which he is able to follow. The mathematician seems to 'get away with it' because he is able to utter with conviction a larger set of noises, unintelligible to anyone who is not a member of the same Union, than lie at the disposal of the unhappy psychologist, so that the weapons of the latter are not inappropriately described as 'slender'. Mathematics has indeed, a tremendous prestige value.

Now the writer of this book, Professor Burt, is not only a distinguished authority on factorial analysis, he is also an eminent psychologist. He has, therefore, great sympathy with the non-mathematical psychologist, and he is prepared to discuss the nature, validity and usefulness of such concepts as '*g*', '*v*', '*f*', and '*p*' from a purely psychological point of view.

He has written a monumental book on the subject—monumental in more than one sense. It is a very long book, the production of which in war-time is in itself a triumph, but it may almost be regarded as a monument erected over the grave of mathematical pretentiousness. Psychologists who cannot follow the detailed technical material of Part II, will read with pleasure, not unmixed with relief, the pages of Part I, in which Burt reveals to us that the mathematician has no technique up his sleeve, by means of which he can make discoveries which cannot be made by any other means. In point of fact the mathematician can only make more precise what we know, or suspect, already, and make suggestions which have to be confirmed by observation. "Even matrix

algebra", says Burt, "has limitations. . . . The introduction of numerical quantities, though scarcely avoidable in applied psychology, raises difficulties in pure psychology, and even in applied psychology, may lead us astray unless supplemented by other modes of statement" (p. 239).

Before considering the views which it contains, a word should be said about the structure of the book itself. It is divided into three parts. In Part I we are given a discussion of the psychological and philosophical status of factors, in Part II we have a technical discussion of the various mathematical devices for evaluating them, while Part III is concerned with the analysis of a group for the purpose of assessing temperamental traits, and with the problem of the distribution of such traits throughout the population. These three parts are followed by an Appendix giving worked examples for the guidance of computers and a short introduction to matrix algebra.

Unfortunately the book gives one the impression of having been built up out of papers and essays written at various times. There is an exasperating array of footnotes, sometimes answering criticism which has appeared since the main text was written, while one's pleasure in reading the main text is diminished by the interpolation of large sections of small print which give the unhappy impression of being afterthoughts. Furthermore, we should have liked a little more mathematical assistance, but to this it may be objected that the technical pages were written for people sufficiently educated to understand them. Certainly the book cannot be understood at all by anyone who knows nothing about factorial analysis to begin with. For such a person a book like—if there are any others comparable—Thompson's *Factorial Analysis of Human Ability*, a masterly work and crystal clear, is an indispensable preliminary to Burt.

However, though the book is difficult to read, it is extremely important, because, as was said above, it discusses the relation between Mathematics and Psychology.

The position may be put in this way. If you give two tests to large numbers of children and find that the results are highly correlated, so that those who do well in one do well in the other, and those who do badly in one do badly in the other and so forth, you can ask two questions. You can ask: what position or marks is a person likely to get in one of these tests, if I know his marks or position in the other? Or you can ask: why are those tests so highly correlated? If you ask the second question, you are tempted to say in reply that a common factor or ability is involved and that the spread of the scores from high to low is partly due to the possession in greater or less degree of this common ability. You may further decide that whatever is left over, unexplained by this common factor, is due to the possession of some ability, specific to each test, in varying degrees by the testees, or you may decide,

with the help of the statistician, that chance errors will account for it. At any rate you are certainly tempted to infer that there is something common to both performances (or sets of performances) which accounts for the high correlation.

Suppose now you give a large number of tests to your testees. You can calculate the intercorrelation of all the tests, and you can arrange the intercorrelations in a square. You will have the correlations between tests  $a$  and  $b$ ,  $b$  and  $c$ ,  $a$  and  $c$  and so on, and there will be a diagonal of empty spaces for the correlations  $aa$ ,  $bb$ ,  $cc$ , . . .

When you look at this 'matrix' of correlations, you may well suspect that there is a common factor running through them all, or you may notice groups which are highly correlated together but not highly correlated with other groups, or even groups highly correlated together and negatively correlated with other groups. This may lead you to suspect several factors, to account for the various groups. In fact there are four possibilities which immediately occur to us: (1) there may be factors common to all the tests, (2) there may be factors common to some but not all of the tests, (3) there may be factors peculiar to individual tests, and (4) there may be 'accidental' factors peculiar to the occasion on which the test was given.

There happens, however, to be one arrangement which has certain mathematical peculiarities. If the numbers in the columns of the matrix have certain simple relations to one another, we have a 'matrix of rank one', a 'hierarchical' matrix as it is called, and this can be analysed into, or can be expressed as the resultant of, one 'general' factor running through all the tests and a specific factor for each individual test. The tests are not all equally 'saturated' with the general factor, and you can now proceed to discover the 'saturation' or the 'loading' of each test with the general factor. Furthermore, you can discover the amount of the suspected 'ability' present in each testee from his score in a test of which you know the saturation. That is to say, you can go back to the original figures from which you started—the test scores—and analyse them into so much general factor (' $g$ ') to account for the intercorrelations, and so much 'specific' (' $s$ ') to account for what is left over with respect to the performance in each test.

The fact that when you have 'hierarchical order', or an approximation to it, you can account for the correlations in this way, and the view that all tests of mental ability do in fact lead to hierarchical order when intercorrelated, are the bases of the so-called 'Two-factor Theory', associated with the name of Professor Spearman.

We may turn to Thompson's *Factorial Analysis of Human Ability* for our first shock. "There are", he says on page 15, "innumerable other ways of explaining these same correlations."

We turn elsewhere for our next shock. It is only by careful choice of tests that you do get any approximation to 'hierarchical order'. The second proposition on which the 'two-factor theory' is based, does not appear to be true.

What if you have tests which do not conform to the simple pattern when the results are correlated? Thurstone has discovered a method of dealing with the situation. Can your matrix of intercorrelations not be regarded as a kind of series of superimposed hierarchical matrices? There might be a number of common factors, each contributing something, and the set of correlations might be analysed as the resultant of a combination of elements. This analysis is the course Thurstone pursues, but at the very start a puzzle presents itself.

If you have a hierarchical matrix and analyse it into one general factor and a specific for each test, you can fix the numbers which you write in the empty spaces mentioned above. You will fix them so as to perfect the hierarchy. When, however, you do not have a perfect hierarchy at all, what numbers will you write in? There are good reasons for excluding some numbers because they make the matrix nonsensical, but there is a range of numbers each of which would 'do'. Thompson, in his exposition of this method, gives instructive examples, showing that, at any rate with small numbers of tests, you get a different answer, and a different number of 'factors' according to your choice. The mathematical pit yawns before us. Can you limit your choice in any way? From a mathematical point of view, one analysis is as good as another, provided the sum is worked out correctly.

Perhaps, however, you have a preference for small numbers. Perhaps you feel that the fewer factors you derive the better on scientific-economic grounds. If so, you will agree with Thurstone, and choose your 'communalities' as they are called, in such a way as to analyse your matrix as the resultant of the smallest number of factors. Whether you do this or not, your 'factors' need not be recognisable, observable traits, they need have no 'psychological meaning'; they are as fictitious as electrons and protons.

This variety of ways in which a system of correlations can be analysed comes out even more clearly when the correlations are presented geometrically. The factors now become sets of axes which best describe an array of positions. Here again preference may be shown for the simplest set, but you can 'rotate' your axes if you like and thus obtain different values for your factors, or you can multiply your axes if you choose. We use the Equator and the North-South axis for our geographical identifications, but it is perfectly clear that we might have taken other lines at right-angles to one another, and with the multidimensional space required for the presentation of multi-factorial analysis, we are not limited to the use of a given number of dimensions.

This emphasis on the purely mathematical interpretation of factors

is *one* of the lines taken by Burt. "The factors in terms of which the psychologist ultimately expresses his results can at most claim only the same kind of existence as the lines or points to which the navigator refers his measurements" (p. 82). Elsewhere he gives more elaborate mathematical statements of the same position, e.g., "We may now define our factors as a hypothetical set of mutually independent, statistically significant linear components, derived from an observed set of measurements by a homogeneous linear transformation" (p. 261). The point here is, not whether that is a satisfactory definition, but the *nature* of the definition itself. Factors, according to this view, are mathematical constructs in terms of which we can organise the correlated results of certain mental activities, or correlated judgments of temperamental traits. Indeed, as Burt is at pains to show, factorial analysis is not by any manner of means confined to psychological data; it can be applied to any set of correlations you like, from whatever source.

Surely the position is that a correlation matrix can be analysed in various ways, every one of which is, from a mathematical point of view as valid as any other, and the resulting 'factors' are merely axes in terms of which the original data can be described, or amounts into which the original data can be analysed. They have nothing to do with the material of the original data whatever—they are symbols standing in certain relations to other symbols. To say that a person has so much '*g*', '*v*', or '*f*', then, is to say that according to such and such an analysis he occupies such and such a position in a plotted array, or has his scores parcelled out in such and such a way, with the implication that if the analysis had been conducted according to a different plan, you would have obtained different results. You may therefore have as many factorial saturations as there are possible analyses. "Factor analysis", says Holzinger, "is a type of statistical theory in which a variety of solutions can be obtained from a given set of data" (*Psychometrika*, vol. 5, p. 233).

So far we have only mentioned Thurstone's method, which aims at presenting a matrix of intercorrelations as the resultant of the fewest number of components, but you might decide that it would be better to remove the factor which accounted for the largest amount of intercorrelation first, then the one which accounted for the next largest, and so on. If you do this you are following in the footsteps of Hotelling.

We seem to have left psychology as we know it far behind. It is clear that the variety of analyses, each equally valid from the mathematical point of view, transcends 'psychological interpretation', and anyone is at liberty to choose any valid analysis and say: 'these are *the* factors responsible for this set of correlations', and he may interpret them as 'mental forces' or 'powers of the mind' if he will. But if he is not careful, someone will say that his interpretation is 'psychologically meaningless'. Psychology has its feeble little thorns too.



What, we want to know, constitutes 'psychological meaningfulness'?

If factor saturations are so parcelled out that tests which we believe on non-mathematical grounds to be similar with respect to the processes involved, are marked out from tests which we believe to involve different processes, and if the proportions of saturation seem, again on non-mathematical grounds, to be plausible, then the factor can be psychologically interpreted by connecting them somehow with the processes involved in the tests. We may try to identify the processes involved in the tests by 'inspection of the tests', or on theoretical grounds. Burt, for instance, says: "To determine the psychological nature of this and other factors, I should rely, not on 'inspection of the tests', but on introspection by the testees" (p. 312).

We might, however, proceed in the opposite direction. We might take an analysis, valid from the mathematical point of view, and find some kind of identification with psychological processes, known on other grounds. This is obviously an extremely dangerous procedure, because it encourages us to force psychological interpretation to fit in with mathematical analysis. It has its uses, of course. It may put ideas into our heads, and it may help us to see likenesses which we should otherwise miss, but unless the processes we infer are confirmed on non-mathematical grounds they are completely devoid of psychological validity.

There is an instructive instance given in this book. When you remove the first factor, you will find factors 'underneath'—which account for the intercorrelation left unaccounted for by factor 1—which have negative saturations for some of the tests. What are you going to do about these? "What meaning", asks Burt, quoting objections made by others, "what meaning, it has been asked, can possibly be assigned to 'a factor which improves certain test-performances when it is not merely absent, but actually negative', or to 'an ability whose possession is a detriment to performance'?" (p. 302).

Thurstone will have none of them. He therefore 'gets rid' of the factors with negative saturations by 'rotating his axes' so that from the new position all the saturations are positive. It is a perfectly satisfactory mathematical procedure, and fascinating to do—fascinating to choose the best position of your axes for your purposes—but is it *psychologically* necessary? Burt says 'No'. "Why should we deny that a group factor may sometimes operate as an interference-factor? Is it not possible that my lifelong reliance on verbal methods may actually handicap me when I deal with tests of a visuo-kinaesthetic type?" (p. 318).

The point is that we cannot be called on to mould our psychological theory on the mathematical analysis of intercorrelation because there is no reason for preferring one analysis to another. We can only ask mathematical analysis to make our vague estimates more

precise, and be grateful when the mathematical analysis can give us hints of unsuspected connections.

This independence of psychology from mathematics is emphasised by Burt: "What may be the ultimate structure of the mind, and whether its parts are numerous or few, and its elements similar or differentiated, are questions, so at least it seems to me, which must be eventually decided by other lines of research—physiological, biological, introspective, and experimental" (p. 11). And again: "Let us agree, then, that mathematical analysis by itself, and apart from all other considerations and inquiries, cannot ever suffice to disclose what mental factors make up the human mind or what mental types are discoverable within the human race" (p. 209).

Nevertheless we do in practice identify certain analyses of our correlations with 'psychological meaning'. How are we to interpret our psychological interpretation? Burt gives several possible formulations, and it is somewhat unfortunate that he does not make it clear that he is really dealing with a different problem. The purely mathematical factor is one thing, the psychological factor is another. The latter is really an interpretation of one possible variety of the former.

Suppose after inspection of tests, or introspection, or both, we have identified a 'general' factor, a 'verbal' factor, or a 'number' factor. What are they? Spearman identifies the general factor with energy, while other writers speak of: 'psychological entities' (Alexander) or 'mental faculties' (Thurstone). "A factor", says Stephenson, "must be a real and tangible entity, defined in terms of psychological needs, not a mere statistical artefact, however elegant the procedure by which it is reached." In such cases there is a tendency to look on the factor as a 'cause' of the performance from which it was derived.

This, as Burt points out, is old-fashioned reification. There is no harm in phrasing one's views in such terms, if one realises that one is speaking popularly, but from a scientific point of view, one must never depart far from the actual performances from which one set out. These performances, whose relations of similarity are responsible for their correlations, should not, according to Burt, be regarded as the effects of unitary causes. In so far as we can analyse test results into varying saturations of a few components, each component should be looked on as a pattern of liabilities to do well, moderately or ill in the performance of a set of tasks. "In my view", says Burt, "the special value of a factor in psychology is that it enables us to hold together in thought a definite but complex pattern of characteristics" (p. 237). And: "The notion of a complex and distinctive attribute that is expressed by a number of separate characteristics, and yet is to be thought of as a unitary whole, is one that should present no difficulty to the modern psychologist. The word *Gestalt* expresses just that conception. When the attribute is a mental factor, specified in quantitative terms,

the nature of the synthesis can be exhibited in graphic form. If each contributory trait is represented by a vertical line, all on the same horizontal base, and if the length of each line is proportional to the trait-measurement or weight, then the special features of the factor will be outlined by the pattern or contour which the tops of the verticals present" (p. 78).

With this rather difficult notion (whatever Burt says) in mind, we can now regard factorial analysis, in so far as it is not merely mathematical, as a method of classifying people according to their ability to perform various organised complexes of action, or as a method of classifying tests according to their efficiency in diagnosing such abilities. Each complex of performances is uncorrelated with every other, so that to say that a person has 'high *v*', or 'verbality', is to say that he belongs to a class of persons who can do a class of things which are marked out as having something to do with the use of words, while to say that a person has 'high motor ability' can be similarly interpreted, and furthermore to say that a person has a certain position with respect to one class of performance gives no information as to his position with regard to the other. "The cumulative result", says Burt after a mention of the practical value of factors, "the cumulative result, and indeed the ultimate aim, is thus a *classification* of these children into significant groups and sub-groups—a classification that would be applicable to the entire population" (p. 96).

We have thus a kind of double classification—classes of different sorts of things we can do, and classes of good, bad and indifferent performance. From the latter point of view factors might be regarded in terms of averages. So we read: "A factor is simply an average or sum total of certain measurements empirically obtained" (p. 74).

Furthermore, the performance itself is an interaction between the person and the test battery. So Burt writes: "The psychologist's factors do not in themselves describe either persons or things used to stimulate them; they describe *the complex relations between the two*" (p. 205) (his italics).

This last way of looking at factors raises a serious difficulty. "We see", says Burt, "at almost every point how dependent the emerging factors will be, not only upon the initial choice of persons to be tested or observed, but also upon the initial choice of tests or traits" (p. 206). And he goes so far as to say on page 364: "In every psychological field it would be quite easy to choose a set of tests which almost certainly would, and another set which almost certainly would not, conform with a pattern illustrated in the table cited". (He is referring to a piece of research he has been discussing.) This need not trouble us much if we are interested in classification, but it will naturally be of importance if we are interested in prediction.

We saw above that we may want to infer the probable performance

in one task from the known performance in another. It is perfectly clear, and both Burt and Thompson insist on it, that this can only be done with any high degree of safety if we correlate the results of a test, or a battery of tests, directly with the performance towards which we are making our inference. The vocational guider will, as Burt puts it: "apply his tests directly to the workers themselves, and deduce a regression equation . . . for estimating success at the work from the tests, without the mediation of any hypothetical factors. This, indeed, is the procedure that I myself have always advocated wherever conditions permit" (p. 61). "The fact that direct prediction is safer than indirect is quickly realised by any investigator who engages in educational and vocational guidance" (p. 53).

If, however, you have a battery of tests which you believe to be adequate classifiers of testees into psychologically significant groups, and if you can analyse other performances into the psychological processes involved, then the 'factorial link' "makes for economy of thought, and, what is still more important in practice, for economy of labour" (p. 62).

Of course Burt is also interested in the further problem: what must be the nature of organisms who display proficiency in this way or that? He thinks that the answer will probably be formulated in neurological terms. He looks with favour on Thompson's neural bonds, now that the notion of 'sub-pools' of bondage have been introduced to help out with 'group factors', but Burt predicts a formulation in terms of *Gestalten*, rather than neural linkage.

This question, however, Burt thinks can be left in abeyance. At this stage of our ignorance we should concentrate on psychologico-mathematical patterns, indicating the probability of being able to act in certain ways up to certain standards, without bothering too much about what enables us to do so.

Part III is concerned with the application of factorial analysis to persons. This topic has already been touched on in Part I, and Burt shows that the same 'factors' can be derived by correlating persons as are derived by correlating tests. We should, indeed, be somewhat surprised if this were not the case.

When, however, we correlate persons to find out whether there is any mathematical confirmation, or expression, of our divisions of people into types, or to get suggestions as to the way in which people can be classified in terms of temperamental traits, we come upon certain special difficulties. How can we assess a person's sociability, his capacity for joy, his liability to experience sorrow or disgust, or his tenderness? We find an interesting chapter on the mathematical assessment of psychological traits, but it must be admitted that such assessment is extremely precarious.

But when we have decided that mathematical assessment is possible, what temperamental traits shall we measure?

An example is worked out for us. Twelve people were assessed

for: sociability, sex, assertiveness, joy, anger, curiosity, fear, sorrow, tenderness, disgust, and submissiveness. It was found that their intercorrelations could be analysed into three factors. The first, with positive saturations for all these characteristics, it is suggested, might be identified with 'general emotionality'. The second separates sociability, assertiveness, anger, joy and sex from submissiveness, tenderness, disgust, fear, sorrow and curiosity, and might be the bi-polar factor of extravert-introvertism, while the third brings together tenderness, submissiveness, joy, sex, curiosity, assertiveness and sociability, and separates these from sorrow, fear, anger, and disgust. "The results (of this third grouping) are consistent with the suggestion that the third factor makes for cheerful or optimistic moods when positive, and melancholy or pessimistic moods when negative" (p. 407).

The whole problem of temperament and its fixity is obscure in the extreme, but, as Burt points out, we do continually make judgments of temperament, and we want temperamental assessments for clinical and guidance purposes. It is perfectly clear that provided we are not taken in by spurious accuracy, evidence as to what qualities are liable to go with what is of the utmost practical value.

We must, after all, consider the practical situations which are largely responsible for all this body of doctrine. Children, adolescents and grown-ups are not merely objects of contemplation, it happens from time to time that something has to be done about them, and those who have to make decisions about their future want all the help they can get. Time is of importance; you are lucky if you have more than an hour in which to make your judgments, and however much we may criticise certain theoretic formulations, a quick way of grouping like with like is going to be useful. We cannot afford to fold our hands and do nothing because we might make a mistake here and there, and experience shows that methods of assessment and classification such as Burt suggests, have practical reliability.

We have remarked that the book seems to be made up of papers written at different times. It is noticeable that in this last part the tone is far more confident than that which pervades the earlier theoretical discussions. We have no elaborate phrases devised to get over philosophical difficulties, Burt is here drawing on his enormous experience as a practising psychologist. He has made predictions in real life and he has found that his predictions are frequently validated by experience. It is all very well for us to say: 'Yes, but what would have happened if you had taken a different battery of tests, or measured different qualities?' The fact that his procedure has pragmatic sanction cannot be lightly dismissed. We must beware lest our head-shaking, and our moans of 'very dubious' become a trifle too automatic and obstructive.

Such are the main themes of the book. Part II in which Burt

claims to show that the differences between the various ways of analysing correlations are more apparent than real (I mean the various *techniques*, not the variety of alternative answers within each technique) is of greater interest to the technician than to the non-mathematical reader, and does not affect the main issue : what is a factor ?

The concluding pages are of interest to everyone. Is there any evidence as to the distribution of temperamental traits throughout the population ? Are introversion and extraversion opposite ends of a continuous distribution such that a "mixed or relatively well-balanced mind" is "the commonest of all" ? Evidence is produced in favour of this suggestion, and Burt urges that further investigation be done on this subject.

It is impossible to pass a single judgment on the book. It is obscure and difficult, the footnotes and varieties in type are well-nigh intolerable, and the student may be bewildered by the numerous definitions of 'factor' that appear from page to page, but there is no doubt about its being an important contribution to the subject. Whenever one reads anything written by Professor Burt, one feels oneself to be in contact with a lively philosophical mind. He is, if one may so express oneself, fundamentally 'un-slick'.

W. J. H. SPROTT.

*Mind and Deity*, being the Second Series of a Course of Gifford Lectures on Metaphysics and Theism, given in the University of Glasgow in 1940. By JOHN LAIRD. London : Allen & Unwin, 1941. Pp. 322. 10s. 6d.

IN the Second Series of his Gifford Lectures Professor Laird undertakes two main tasks, which he considers to be interconnected. The first is to examine the common-sense realism or dualism which was provisionally assumed in the First Series, and to see whether it ought to be replaced by some form of mentalism. The second is to supplement the First Series by considering those mental and moral properties which theists have generally ascribed to God.

Professor Laird considers that the two forms in which the Ontological Argument has been presented, first by philosophers before Hegel, and then by Hegel and his followers, illustrate the transition from a realistic to an idealistic point of view ; and for this reason he begins with a discussion of that argument. He accepts Kant's criticisms on the older form of the argument ; and they are, in fact, unanswerable. He points out, however, that acceptance of Kant's criticisms does not commit one to the epistemological principle that the only possible evidence for any existential proposition must be sense-given. This is obviously true. As regards that epistemological principle itself Professor Laird holds that it is not inconceivable that there might be some existential propositions for which there was evidence not given by the senses ; but I do not think he claims

to know of any instances of such propositions. I wonder how widely the term "sense-given" is to be interpreted in this epistemological principle? If it is taken literally and narrowly, the principle is plainly false, since the evidence for one's own past experiences depends on memory and introspection, and not on sensation. If it is taken so widely as to mean that the evidence for any *singular* existential proposition must include *acquaintance with particulars*, it has a good claim to be true and evident. I do not think that Professor Laird's hypothetical example of telepathy on page 44 would be a counter-instance to the principle when thus interpreted.

What Hegel called the "Ontological Argument" is, according to Professor Laird, not an argument at all, but an assertion which might be called "the Grand Ontological Assertion". The claim is that "what is really *given* to us is the infinitude of all being . . . and that this Absolute Whole . . . is thought-laden throughout" (p. 48). The upshot of Professor Laird's discussion is that, whilst it is not inconceivable that our datum might be of this kind, inspection does not show us that it is, and the arguments brought forward by idealists to prove that it must be are quite inconclusive. Moreover, the Whole which the G.O.A. asserts to be given to us would lack several characteristics which most theists would regard as part of the notion of God.

In the second lecture Professor Laird discusses "The Nature of Mind". His argument is rather rambling, and therefore difficult to summarise fairly; but, if I have not misunderstood him, the main points may be expressed as follows: The nature of a mind is most clearly revealed in the state of being awake and alert, and the most fundamental feature of this state is cognitive consciousness. But such consciousness or "awareness" includes two quite different, though intimately interconnected aspects or "dimensions", *viz.*, the reflexive and the transcendent. Compare, *e.g.*, the two experiences which would be expressed by the two sentences, "I am feeling a shooting pain" and "I am remembering a shooting pain". As regards the latter, it is quite sensible to suggest (a) that I might have had such a pain without now remembering it; (b) that I might now be having this ostensible memory-experience without having had such a pain; and (c) that, even if I did have such a pain as I am now remembering, there may have been features in it which I am not remembering at all, or am misremembering. Even if the memory is perfectly correct, it is evident that the experience of remembering now must be numerically other than the pain which was felt then. This is an instance of transcendent cognition. Now none of these suggestions can sensibly be made when a person says "I am feeling a shooting pain". It is not sensible to suggest that he might be having a pain without feeling it, or feeling it without having it, or that it might really be dull and throbbing though he feels it to be shooting. Nor is it in the least plausible to suggest that there are here two contemporary particulars, *viz.*, an experience



of feeling and a pain felt. The sense in which a person is aware of a pain in feeling it is non-transcendent awareness.

Now I understand Professor Laird to hold that whenever a person has a transcendentally cognitive experience, *e.g.*, a memory or a perception or a process of thinking, he is *ipso facto* aware of that experience in the non-transcendent way in which he is aware of a pain in feeling it. Professor Laird does not accept the arguments which have been used to show that there cannot be *transcendent* reflexive awareness of contemporary experiences, and he thinks that in point of fact there is such awareness. But he points out that, even if the arguments were valid, they would not show that there can be no reflexive awareness of contemporary experiences; and he holds that reflexive awareness of the transcendent kind depends upon that of the non-transcendent kind.

The third lecture is entitled "The Implications of Idealism", but a considerable proportion of it is occupied with classifying the various kinds of idealism and summarily refuting either them or the main arguments for them. Professor Laird distinguishes epistemological and ontological idealism. He sub-divides the former into "pan-idea-ism" and "pan-ideatism"; and he identifies the latter with panpsychism. This does not seem to me to be a very happy division. Surely idealism of every kind is ontological and panpsychic, and what is here called "epistemological" idealism is simply those systems of ontological idealism which are founded wholly or mainly on epistemological arguments. An odd result of this classification is that Berkeley, whose arguments are largely epistemological, and Leibniz, whose arguments are almost wholly logical and ontological, are both counted as ontological idealists. Pan-ideatism is the theory of which the extreme and perhaps the only consistent form is the doctrine of an unknowable thing-in-itself. It is the theory that everything which anyone cognises is coloured and distorted to an unknown extent by being cognised. Pan-idea-ism is the theory that there is nothing but ideas. I take it that this is meant to include the denial of minds as well as of matter. Professor Laird does not mention any philosopher as an upholder of this theory, and I am not at all clear about what he has in mind in his references to it.

Professor Laird's conclusions about the implications of idealism may be summarised as follows: No form of idealism which was compatible with known empirical facts would justify a more cheerful view of man's nature and prospects than would be justified by a non-mentalistic interpretation of the same empirical facts.

In the fourth lecture, on "Omniscience", Professor Laird discusses two questions, *viz.* (i) whether there are reasons why there must be a being who knows everything, and (ii) whether such a being is possible at all. He says that the arguments for an omniscient being attempt to show that no one could know anything unless someone knew everything. He distinguishes two arguments, that from

"Sovereign Essences", which he associates with Plato or some of his followers, and that from "Eternal Truths", which occurs in Leibniz's writings. There is much learned historical discussion before Professor Laird finally dismisses these two arguments. My own feeling is that his difficulty here is not so much to knock down the arguments as to make them go through the motions of standing up to be shot at. If the arguments have been fairly presented (and I have no doubt that Professor Laird has done his best for them), it seems doubtful whether he is shooting at even sitting birds or only at a couple of stuffed owls.

The second question divides into two. Could there be a person who knows at each moment (*a*) all that is and has been known by anyone up to that moment, or (*b*) all that ever could be known? In each case we have further to consider in turn ( $\alpha$ ) transcendent, and ( $\beta$ ) non-transcendent knowledge. Professor Laird's conclusions about (*a*) are as follows: It is not inconceivable that one person should know transcendentally all that is or has been known transcendentally by anyone up to a given date. It is unintelligible to suggest that anything which is known non-transcendentally by A could also be known non-transcendentally by anyone but A (*e.g.*, that B should feel literally and numerically the same feeling which is being felt by A). Therefore, if there be any particulars which can be known *only* non-transcendentally, it is impossible that any one person should know all such particulars as have been known up to a given date. Lastly, it seems almost certain that there *are* particulars (*e.g.*, feelings) which can be known only non-transcendentally, though there are differences of opinion about the range of such particulars. Professor Laird, *e.g.*, would not include *sensa* or images or bodily feelings among them, whilst many other philosophers would do so.

Since the narrower possibility envisaged in question (*a*) has been denied, the wider one which was mooted in question (*b*) can be rejected without special discussion. Professor Laird, in fact, devotes the rest of the lecture to discussing certain limitations on all possible knowledge and certain peculiarities which have been ascribed to divine knowledge. He points out that certain limitations which Locke ascribed to specifically human knowledge would probably affect all conceivable knowledge. If there are "brute facts", they will be "brute" for every knower who does not deceive himself about them. He also remarks that, with his own view of time, it is literally impossible that there should be non-inferential knowledge of the future comparable to memory-knowledge of the past; and that this is quite independent of the question of determinism in the causal sense. I think that this is a correct inference from the theory, but it suggests two comments to me: (1) If statements about the future are at present neither true nor false, is there not some difficulty about even inferential knowledge or probable opinion concerning future events? (2) The evidence for the occurrence of

apparently non-inferential knowledge of future events is already fairly strong, and is accumulating fairly rapidly in the experimental work of Mr. Soal, Mr. Whately Carington, and Dr. Rhine and his pupils, to go no further. I should feel rather uncomfortable in holding a theory of time which ruled out the possibility of such knowledge *in limine*.

Professor Laird deals with the ascription of *Personality* to God in his fifth lecture. He first considers what "personality" means and implies in men. It is a property of an embodied mind; it is acquired in the course of interacting with a social environment; and an important element in it is that of legal and moral responsibility. He next considers whether these three factors in human personality make it an inappropriate concept to apply to God. This may be denied either by contending that none of these three features is essential to the concept of personality or by contending that there is nothing in the concept of God to prevent his having a body of some kind and interacting in some way with a social environment and being in some sense morally responsible. By a judicious combination of these two methods Professor Laird tries to show that it is not necessarily absurd, though it must always be highly Pickwickian, to call God a "person".

The next topic discussed is whether it is possible to combine the propositions that God is the whole universe and that he is a person, in view of the fact that this would involve the consequence that one person contains all other persons as parts. Professor Laird considers in turn empirical analogies and metaphysical arguments. He holds that the facts of multiple personality and the unity of individuals in social groups lend no support to the view that several selves can be parts of a single self. The utmost that the former would suggest is that a single organism may sometimes be animated by more than one self; and the utmost that the latter would suggest is that a community of persons may be a spiritual substance (though not a person) of a highly valuable kind. The metaphysical discussion consists mainly of a statement and criticism of McTaggart's doctrine that it is evidently impossible for two selves to have any part in common. In this connexion Professor Laird points out that for McTaggart all self-knowledge is transcendent, whilst, on his own view, such knowledge is primarily non-transcendent. He throws out, though with no great confidence, the suggestion that a whole which had non-transcendent awareness of itself might contain parts which were non-transcendently aware of themselves.

The rest of the lecture is concerned with the following question: Is it not an essential part of theism that the world is ordered with wisdom, justice, and benevolence? Can any meaning be attached to such statements, and, if it could, would there be any reason to accept them, unless the world is governed by a wise, just, and benevolent person? The essential points of Professor Laird's answer to this and all similar questions may be put as follows: Provided that inanimate, animate, and mental nature are, in fact,

so constituted and inter-related that their laws and collocations produce the kind of results which a wise, just, and benevolent person would approve, it is a matter of indifference whether these results are due to the existence and action of such a person or not. And there is no conclusive reason why any kind of good results which might be produced by the deliberate action of a cosmic Person should not equally arise, in the absence of such a person, from the laws and collocations of the material and spiritual universe.

This topic is pursued further in the sixth lecture, on "Providence". The lengthy discussion of physical and moral evil, with which the lecture begins, leads to the tame but judicious conclusion that the world contains much good and much evil and not a sufficient balance of either over the other to compel us to accept or to reject a belief in Divine Providence.

Professor Laird points out that the theory of Providence is a specification of the theory of God as a designer, *viz.*, that he is a being who orders the course of nature wisely for good ends. Of course he has long ago argued that there is no valid reason for accepting a God who is in any sense a designer. He now argues that it is difficult to combine the theory of a designer with the notion that God is perfect, in the double sense of morally excellent and ontologically all-embracing, though there might not be the same difficulty if the former feature were kept and the latter were dropped.

The next two lectures are concerned with Value in connexion with theism. The first is entitled "Value and Existence". Professor Laird starts by considering the slogan "There can be no divorce between value and existence" and trying to see whether there is any sense in which it is neither trivial nor obviously false. He points out (i) that the notion of having value sometimes means having positive as opposed to negative value, and sometimes means being either valuable or disvaluable; (ii) that in neither of these senses is it logically entailed by the notion of existing; and (iii) that we must distinguish between "maintenance-values", such as the power of an organism to adapt itself, to repair itself, and to reproduce its species, and "axiological values" such as truth, beauty, and moral goodness. Now the slogan would be of interest only if it meant or implied that everything has positive axiological value; and in this sense it cannot be true, since only rational beings and certain of their actions and experiences can have axiological value or disvalue. It is charitable to suppose that there is something behind the verbiage of a slogan which has been repeated with such enthusiasm by so many great and good men; but I have never been able to discover what it can be, and Professor Laird has been no more fortunate. It will be worth while to quote an excellent comment from page 227 on Lotze's dictum that what should be is the ground of what is: "We attribute to all existence the sort of effect that some existent (*e.g.*, the thought of value) can excite in some other existent (*e.g.*, a man), and so profess to speak about a

reason for existence itself. A little brief reflection . . . should be sufficient to dispel all such dreams."

The second of these two lectures, which is the eighth in the course, is entitled "The Moral Proofs of Theism". It begins with a brief refutation of the ridiculous argument that the existence of moral "laws" involves the existence of a supernatural law-giver. The rest of the lecture is occupied with an elaborate critical discussion of Kant's doctrine of the primacy of practical reason and noumenal freedom. Professor Laird seems to me to draw the right distinctions and to make the right criticisms; but there is little which is both new and true to be said on the subject.

There is a discussion on Human Immortality in the Appendix to Lecture VIII. I think that the most important part of it is fairly summarised in the last paragraph but one (p. 265): "I . . . agree that individual human immortality would provide a much more plausible basis for the indestructibility of the values (or disvalues) humanly achieved than, so far as I can see, any alternative theory. But it is not true that there could be no conservation of human values if a human soul never survived the death of its body."

Lecture IX, on "Pantheism", opens with two general remarks with which I heartily agree. ". . . So many Western theologians and so many Western philosophers have been very unfair to pantheism" (p. 266). Yet ". . . it is plain that many theologians and a great many Christian theologians are pantheists".

Professor Laird divides pantheism into (i) distributive, and (ii) totalitarian. The former holds that every part of the universe is either (a) wholly, or (b) partly, divine. Alternative (b) is called "mitigated" distributive pantheism. I think that it would probably be better to state distributive pantheism in terms of McTaggart's notion of a "set of parts", and to say that it holds that the universe has a set of parts, each of which is either wholly or partly divine. Professor Laird's discussion has practically reduced it to this by the middle of page 274, and it is doubtful whether the theory is worth consideration if taken more widely. It seems fairly plain that nothing below the level of human persons could be called "divine" in any non-trivial sense. Therefore the problem of distributive pantheism resolves itself into the two following: (1) Are human beings divine? (2) Is there any reason to believe that the universe has a set of parts consisting of nothing but human beings and other persons at least as highly organised as they? Professor Laird discusses, but does not profess to answer, these questions.

Totalitarian pantheism (which does not necessarily exclude pantheism of the distributive kind) is the doctrine that all that exists forms a highly integrated unity, and that this whole is divine. It need not be (and, in view of what Professor Laird has argued before, barely could be) a self. But a whole might be very highly integrated and have great intrinsic value without being a self. This is true; but could it have much intrinsic value unless it were *either*

a person or a society of intimately inter-related persons? If this is an essential condition, we are back at the second question which was raised and left unanswered in connexion with distributive pantheism. Professor Laird thinks that it would be difficult to hold that such a whole could be perfectly good in view of the badness of some of its parts; but he does not think that this kind of pantheism would be incompatible with some of its parts possessing moral freedom in any sense in which it is at all plausible to suppose that men do, in fact, possess it.

Professor Laird next discusses a theory which he calls "monarchial pantheism". He says that many theologians use language which implies (a) that God simply is the totality of all that exists, taken as a collective whole, and (b) that he also is the supreme governor of that whole. He tries to do what he can for this doctrine by means of a distinction between "dissociable" and "participating" parts; but he finally concludes that this distinction will not help, and that the doctrine is nonsensical, because it would require the Whole to be one of its own parts. I do not myself see why it need involve such nonsense as this. Why should it not be interpreted to mean that the Whole, taken as a collective unity, is divine and stands in a relation of pre-eminence over each of its parts severally and over every collection of them?

The last lecture, called "Concluding Reflections", falls into three parts. The first is a synopsis of the argument in the Second Series; the second discusses the connexion between this and the First Series; and the third contains some general reflexions on the whole subject.

The following seem to be the most important points: (1) If the purely cosmological considerations of the First Series suggest the existence of God at all, what they suggest is that the universe is a system having certain properties which would justify us in calling it "divine". There is nothing here to encourage the belief in a divine person or group of persons to whom the rest of the world owes its "deiformity". Now many philosophers would say that, when axiological facts are taken into consideration, the scene changes and the form of theism which was the more probable of the two now becomes less probable than the doctrine of a transcendent divine person or group of persons. It is obvious that Professor Laird does not accept this view; or at any rate that he considers the *prima facie* difficulties of transcendent theism to be so much greater than those of immanent theism that he is very anxious to show that the axiological facts are consistent with the latter.

(2) If we ask whether Professor Laird thinks that the known empirical facts favour theism, even of the impersonal and immanent kind, we seem to meet with a different answer in the second and in the third section of these "Concluding Reflections". On page 304 he writes: "Empirically I cannot find high spiritual properties except in human minds or in societies of human minds. Human

minds do not seem to me to constitute a large part of the world, or to be the strongest part of the world. Such appearances, no doubt, may be very deceptive ; but they *are* the appearances. . . .” But on page 319 he writes : “ . . . I did not appreciate the force of theism when I began this enquiry. . . . While I do not think that any theistic argument is conclusive, and am of opinion that very few theistic proofs establish a high degree of probability, I also incline to the belief that theistic metaphysics is stronger than most, and that metaphysics is not at all weak in principle despite the strain that it puts upon the human intellect.” I must confess that I can find nothing in either Series to justify the favourable estimate of theism in particular or metaphysics in general expressed in the latter sentence. It seems to me that the first sentence quoted is in accordance with the facts and with the findings of these lectures. The impression which I get from the two Series is that, unless Theism can derive support from the facts of specifically religious and mystical experience which Professor Laird has deliberately excluded from his purview, there is nothing to entitle it to serious consideration.

C. D. BROAD.

*An Introduction to Hegel.* By G. R. G. MURE. Oxford : at the Clarendon Press, 1940. Pp. xx + 180. 10s. 6d.

THIS is a difficult book to review. It purports to be an introduction to Hegel for non-professional readers. “For the professional student,” the author promises “to offer a book on Hegel’s logic in close connexion with the present work”. The present work thus presupposes no acquaintance with Hegel ; “the business of an Introduction is to introduce,” and to introduce is “to whet the appetite” for acquaintance and not “to provide a substitute” for it (p. xix). This task the author seeks to accomplish by expounding Hegel, not against the background of his immediate predecessors and contemporaries, but rather against that of Greek philosophy. His main intention is “to contrast Hegel’s general philosophical position with Aristotle’s as if Hegel had reached his own view simply through the effort to solve the problem as Aristotle left it” (p. 52). But the author is not content with a mere exposition of Hegel’s philosophy ; his ultimate purpose is to vindicate it against criticism. “The book may be found to possess some unity if it is read as a gradual approach to Hegel’s conception of truth” (p. xix), and this conception, in the polemical context in which the author develops it, emerges as the only tenable one. This special treatment of Hegel’s philosophy is *eo ipso* a case of special pleading.

The book has thus a three-fold aim—to make Hegel intelligible to the elementary student ; to interpret Hegel in relation to Greek thought ; and to exhibit Hegel (to echo the words of one of his early disciples) as *der unwiderlegte Weltphilosoph*. Truly an ambitious programme for a slender volume !



It cannot be said that the author has succeeded in carrying out the first of his aims. The word "introduction" is a misnomer in connexion with this book. There is hardly an unprofessional reader, it is safe to say, who could appreciate the abstruse arguments through the medium of which Hegel is presented to him. Before Hegel can come within his ken, he must first grasp Greek philosophy and the problems Aristotle left unsolved. Accordingly, almost half of the book is devoted to Aristotle, the salient features of whose doctrine are set forth with an amount of technical detail accessible only to the most advanced connoisseurs of the subject. Those without an intimate knowledge of the questions here so forbiddingly broached will find their treatment opaque and esoteric. The author's design to study Aristotle and Hegel at once, each couched in terms of the other, cannot be justified unless the book is intended for a small coterie of highly trained specialists. Indeed, it is difficult to conceive an approach to Hegel less suited as a general introduction to his philosophy.

Although a signal failure as an introduction, the book is important as an interpretation of Hegel, principally for those already familiar with the original and relevant texts. Hegel's philosophy is, of course, too complex to be forced into the Procrustean bed of Aristotelianism, yet much light may be thrown on many of its issues by tracing their relation to Greek thought. To understand these issues adequately, it is necessary to disengage the Hellenic influences that shaped Hegel's thinking, the speculations of Plato and Aristotle being for Hegel "one in principle" (p. xi). The emphasis on these influences is not misplaced. Hegel's debt to the Greeks is evident to every student of his works. The author has explored this debt with thoroughness and care; and by doing so, he has managed to restate compactly but clearly some of Hegel's major tenets. With painstaking labour, involving minute scholarship and fine discernment, he has painted a fresh portrait of Hegel in colours deeply steeped in Aristotelianism. The portrait is fresh but not new. It must not be forgotten that Haym, in *Hegel und seine Zeit* (Berlin, 1857), drew a similar picture of Hegel. But whereas Haym disparaged Hegel for being too Hellenic in his point of view, the author eulogizes him for having conceived his own philosophy as the fulfilment of what is but latent in the speculative endeavours of the Greeks. "For to Hegel," as he says, "belongs the credit of demonstrating afresh that not the flower and fruit but the entire and living root of our philosophy is still the thought of Plato and Aristotle" (p. xi). Unlike Haym, then, he explains Hegel not as imitating or emulating Plato and Aristotle, but as developing and realising their "implicit" or "immature" idealism.

Now it is one thing to recognise Hegel's great indebtedness to the Greeks for many of his conceptions, but it is quite another to depict him as having done nothing more than to bring to fruition the incomplete doctrines of the ancients. Hegel's philosophy as the culmination of Aristotle—this is the gist of the author's historical thesis.

"To reconstruct the Aristotelian universe" (p. 61)—in this is supposed to consist Hegel's historical task. The "train of reflection from an Aristotelian starting-point"—this is what we must follow in "the Philosophy of Nature and the Philosophy of Spirit as these are contained in Hegel's *Encyclopædia*" (p. 81). The relation of Hegel's philosophy to Aristotle being for the author so "essential," no wonder that the more immediate historical background of the Hegelian system is either ignored or neglected. To have introduced Hegel against that background, the author contends, "would have given a most misleading impression of provincialism" (p. xi). Kant, it is true, is singled out for some detailed and subtle exegesis in connexion with Hegel's categories, but the exegesis is dialectical rather than historical, designed to show that the critical philosophy, seen from Hegel's point of view, is "a half-way position" (p. 91), and that the *Critique of Pure Reason* "is an inevitably self-defeating attempt to philosophise while remaining at the level of the Understanding, a sacrifice of philosophy upon the altar of science and mathematics" (p. 102). Of the historical influence of Kant's antinomies upon Hegel's dialectical method there is no discussion. Little is said of Fichte, and almost nothing of Schelling.

To represent Hegel exclusively against an Hellenic background, and to disregard the more immediate influences upon him, may not be "provincial," but to represent him thus is to give a most misleading impression of his actual development. The transition from Aristotle to Hegel without intermediaries can hardly be called "historical" in a precise sense. The author, justifying his one-sided approach to Hegel, pleads in extenuation that "I could not begin by outlining the whole history of philosophy as Hegel saw it, and indeed also wrote it" (p. xi). What Hegel "saw" in the history of philosophy (judging by his various lectures on the subject, as edited by Michelet, not only from Hegel's manuscripts, but also from the collated notes of different students) is no index to the history of his own system. Hegel ranged through the entire history of thought with an imperialist's eye, as it were, looking upon all its stages and phases as "lesser breeds," but not without the law; for the law of their emergence and supersession he construed as a dialectical one, in accordance with which they were but the distilled "moments" of a logical hierarchy culminating in his particular form of idealism. But this imperialist theory of the course of human speculation, which we are not bound to accept, throws no light on the historical causes that conditioned the inception and evolution of Hegel's peculiar doctrine. If we discount the influence wrought upon its genesis and formation by Hegel's immediate predecessors and contemporaries, we abandon historical causation altogether. One illustration will suffice. The author interprets Hegel's Philosophy of Nature "as an effort to solve an Aristotelian problem" (p. 73). This is simply not a true historical judgment. The origin of the *Naturphilosophie* must be traced not to Aristotle but to

Schelling. We now have in complete and authentic form the first sketch of Hegel's system which he taught in Jena. This system, edited by Hoffmeister, under the title *Jenenser Realphilosophie* (Leipzig, 1931 and 1932), contains two separate versions of Hegel's Philosophy of Nature. The first version, the lectures of 1803-04, echoes unmistakably, both in content and expression, Schelling's romantic speculations. The historical student of Hegel cannot dismiss in cavalier fashion this important documentary evidence. On the basis of this evidence, it is clear that, before he became an Aristotelian in his conception of Nature, Hegel was definitely a disciple of Schelling.

With the bulk of Hegel's early writings now accessible to scholars, it is no longer possible to treat his finished system without reference to its antecedent formulations, and these formulations reveal manifold influences of which the Hellenic are not the only "essential" ones. In a footnote (p. xvii) the author admits that "since Nohl's *Hegels theologische Jugendschriften* (1907) much of interest has come to light through the examination of previously unpublished MSS. of Hegel. But I have ignored it, because I was sure that any use of it would blur the broader historical outline which I have attempted in this *Introduction*." A strictly logical outline of Hegel's main conceptions might have been "blurred" by the inclusion in it of material regarding their origin and development; but an outline purporting to be *historical*, however broad in scope, cannot ignore new and relevant evidence incompatible with it, and demanding an altogether different orientation. On the evidence contained in the theological writings, Dilthey, for example, in his *Die Jugendgeschichte Hegels*, derives Hegel's system from a mystic experience and not from an intellectual effort to reconstruct the Aristotelian universe. Much scholarly labour has been spent on Hegel's unpublished material to trace the genesis of his mature philosophy. Haering has written a monumental work (*Hegel. Sein Wollen und Sein Werk. Eine chronologische Entwicklungsgeschichte der Gedanken und der Sprache Hegels*. Volume I, 1929; Volume II, 1938), of which the subject of research is the growing rather than the grown Hegel; and for the purpose of re-creating Hegel's philosophy in the making, Haering has examined in detail everything—literally everything—committed to paper by the young philosopher prior to the publication of the *Phenomenology*. And the Hegel who emerges from Haering's punctilious study is one whose philosophy, not sired by Aristotle, was distinctly "autochthonous," though beholden for its many twists and turns, whether thematic or linguistic, to a variety of sources. But to this massive and erudite work there is here no allusion. The neglect of the results of modern scholarship concerning Hegel's formative genius is unfortunate, for in the light of them the thesis advanced by the author seems antiquated if not obsolete. Indeed, his *Introduction*, with the exception of the polemic directed against recent philosophy, might have been written by an orthodox Hegelian of the last century.

What could be more orthodox than the excessive claim made for the finality of Hegel's system? The author identifies Hegel's idealism with philosophy *as such*, extolling it as the *ultimate* realisation of all the anterior stages and forms of reflective thought. Philosophy being synonymous with Hegelianism, it follows that unless we think *à la* Hegel, we do not think as philosophers at all. For Hegel, though difficult, "has the huge merit of forthrightness. He knows what he means, and he says it with vigour and completeness of expression, and on the whole with far less wavering and self-contradiction than most philosophers" (p. xviii). Such an extravagant statement is certainly not borne out by those who have honestly, and even sympathetically, struggled with Hegel's texts. Interpreters of Hegel, to quote W. Wallace, "have contradicted each other, as variously, as the several commentators on the Bible". It is not the interpreters who can be blamed for their contradictory versions of a philosophy so notoriously obscure in meaning and language. Of keys to the secret of Hegel there has been a bewildering number, amongst which the author's is but one. The author's bias in favour of *his* Hegel carries him very far indeed. As contrasted with *his* interpretation of Hegelianism, he does not hesitate to stigmatise the state of British philosophy prior to the advent of the idealists as a "state of barbarism" (p. xv), and to characterise empiricists as but "half-philosophers," in whom "the philosophic interest is never, or for a period only, dominant" (p. xvi). All non-idealists, meaning strictly all non-Hegelians, are thus barbarians or "low-grade thinkers," because they are said to be concerned merely with the "natural history of thought" (p. 162), and not with thought as the self-constituting activity of the Absolute Spirit.

The distinction between low-grade thinking and high-grade thinking pervades the entire book; it is the basis of the author's constructive as well as of his polemical arguments. It is the familiar distinction, worked out in conventional fashion, between the logic of the Understanding and the logic of Reason. The author contends that Plato, Aristotle, Kant (and later Bradley and Bosanquet) could not free themselves wholly from the logic of the Understanding and thus failed to develop a full-fledged idealism. Hegel alone, for whom Reason is supreme over Understanding and includes it, passed beyond the categories of the finite Understanding and reached the notion of an Absolute Spirit. This Absolute Spirit requires for its single and all-pervasive activity a system of categories, the *very* system Hegel constructed. In this system, embodying the creative dialectic of a universal reason, "philosophy at length realises and contains within itself the stages of its immaturity" (p. x). And this system is philosophy *par excellence*, flawless and incontrovertible.

The attempt by a contemporary writer to revive orthodox Hegelianism is interesting and provocative. It is a vigorous and wholesale challenge to every modern departure from it. The author throws down the gauntlet to the protagonists of dualism, pluralism,

nominalism, realism, subjectivism, phenomenalism, empiricism, positivism. He rebukes them for not being philosophers because they are not Hegelians. The challenge, one may confidently predict, will fall on deaf ears; it is too overweening, too uncompromising. That to be a genuine philosopher one must be a faithful disciple of a Græco-inspired Hegel (and this is the chief tenor of the book) few will be inclined to take seriously. Hegel's philosophy is uncaeniably the achievement of a great and original genius. Much of it is a wholesome antidote to certain recent philosophic aberrations. But the claim that Hegel's system exemplifies the last word in constructive thought, and that it alone comprehends the absolute and infallible truth, is a claim that borders on zealotry.

J. LOEWENBERG.

## VI.—NEW BOOKS.

*Ideals and Illusions.* By L. SUSAN STEBBING. London: Watts & Co., 1941. Pp. xiii + 206. 8s. 6d.

THIS book contains a great deal that is characteristic of its author: therefore much of importance. Its theme (speaking broadly) is that the spiritual muddles and discontents of this wintry century are even more distressing than the greed and slaughter that has attended them, and that what we need most of all is clear ideas about what it means to live to good purpose. Since the author is secular, not religious, and believes in a liberal atheological Christianity, with echoes of what Thucydides made Pericles say, she deals in the main with ethical and socio-political notions.

Her first essay or chapter, "Ideals and Utopias", strikes the keynote. Ideals may but need not be impracticable. They are what a man judges to be good and worth while attaining. So they are sought in Realpolitik and in race ideologies as well as by Benthamite liberals, communists, the church militant, and the church contemplative.

Hence we infer (chap. ii) that it is quite possible to be this-worldly and spiritual too, and after a reminder (chap. iii) that a bluff and breezy attitude is a poor substitute for clear-headedness, the author decides (chap. iv), rather expeditiously, that the maxim "all men alike ought to be free and happy" expresses by far the sanest creed. This, she says, or any other piece of practical ethics (chap. v) has to avoid over-abstraction because it has to deal with actual situations which, *e.g.*, may very well require that a writer, for the time being, should abandon his typewriter for a machine-gun. But freedom, contentment, and inward peace are the only bricks for building a better world (chap. vi). ["Democracy" is taken to mean a vision of good (or of free and happy) living and not a mode of government. This, at the time the book was written, had the prophetic advantage of ranging communists and democrats under the same banner, but it seems to me to involve an abuse of English.] A "digression of importance" is introduced (or re-introduced) in chapter viii. We are warned against the vice of personifying collections and are given the beginnings of an analysis of conscience, not untechnical. The last essay (chap. ix) returns to the conviction that morality does not require supernatural, sacramental, or other-worldly sanctions.

A part of Miss Stebbing's technique is to test her ideas in a sharp flame of controversy. Widely read, she selects an extreme example of the enemy's views, mostly muddled, deals with it ruthlessly and, even then, is seldom content to leave the slain alone.

For myself I have to confess that I do not think *Ideals and Illusions* as effective as Miss Stebbing's two previous books. It would be expecting a lot, even from her, to expect her to do it again; but I must try to explain why, although grateful, I feel a certain disappointment.

I don't think the book is very well arranged. If it strains after definiteness, it is rather negligent about system. I am puzzled about the difference between "abstractions" and "pseudo-abstractions"; and the exits

and the entrances of the author's incursions into technical ethical theory do not always seem to me to be happily timed.

I think Miss Stebbing's earnestness is sometimes at odds with her impartiality. For instance, her pictures of the Nazis and of their opponents seem to me to be a little melodramatic. The bad ideals are so very bad, and the good ideals, though often sickly, are so unquestionably splendid. (I am not talking about the Nazis' deeds; but Miss Stebbing, mistakenly I think, although the antithesis asks for trouble, puts ideals and ideas before their execution.) Thus when she says (p. 62), "This is a view, derived in part from Hegel, in which the individual is regarded as merged in the whole, and as nothing apart from the whole, and, so far as I can see, nothing much *in* the whole," I think the final comment more tart than just.

Miss Stebbing is sometimes rather careless in the arrangement of her arguments, and sometimes she exaggerates. As regards the first; in arguing characteristically and, I believe, correctly that slum conditions, *however produced*, are evil, and consequently that the evils of slums cannot consist solely in the slum-owners' state of mind, she weakens her argument by maintaining, in the first instance (p. 35), that slums are evil because they impede spirituality, although she soon goes on to argue that unnecessary suffering is morally reprehensible in those responsible for it, whether or not it is spiritually deleterious to the sufferers. Somewhat earlier (p. 30), she exaggerates when she says: "As a first step to clarity we should do well to ask ourselves whether we should judge it worth while to be kept alive for years (supposing this to be possible) on condition that we were, throughout those years, confined in a crowded shelter while a perpetual air-raid was in progress, and finally to die without emerging from the shelter. The answer, I assume, is clearly that it would not be worth while." It is true that she admits on the same page that excellences of moral character could "flourish" under such conditions. That is very handsome, especially as she interprets morality pretty liberally. But Bunyan and Boethius might have had something more to say about it.

To insist on being definite at all costs raises hopes that may easily be dashed. Mine were damped. I did hope for rather more in the way of definition. In any case, a full discussion of the sort of definiteness that could be expected in such matters would be at least as appropriate as a discussion about pseudo-abstraction. Muddle is indefensible and vagueness may be hard to excuse; but there is over-definiteness in asking how many hairs a man must lose to be bald, as Miss Stebbing has often told us.

While, personally, I agree that moral standards are neither ruined nor insecure if they are not based upon religion or theology, I do not think that "The Last Illusion" is a happy title for the chapter which (as I judge) is principally concerned with that matter.

JOHN LAIRD.

*Philosophical Foundations of Faith: A Contribution towards the Philosophy of Religion.* By MARION JOHN BRADSHAW. Columbia University Press, New York. (Humphrey Milford, Oxford University Press), 1941. Pp. x, + 254. 16s. 6d. net.

THE author tells us frankly in his Preface that this book, based on Lectures to a Convocation of American Congregational Ministers, is addressed to students of religion rather than to philosophers. He was asked to



speak on 'What it means to be a Christian', and, seeking a new way of approach to a familiar subject, decided to discuss the religious ideas of six of the leading seventeenth-century thinkers. All those selected—Descartes, Hobbes, Locke, Pascal, Spinoza, and Leibnitz lived, like ourselves, in troublous times; all were laymen and bachelors, and none of them was a professor. All were at one in affirming the rights of reason in matters of religion, and "while it would be fantastic to maintain that the philosophy of each one culminated in his religious ideas, they were alike in that some phase of the thinking in each did culminate in a view of Christ" (219). In so far as the lectures are apologetic the plea is on behalf of a 'reasonable' Christian faith. They aim at showing that "the intellectual defence of Christianity does not necessitate the acceptance of some particular philosophy as the only one consonant with faith in Christ and the coming Kingdom" (229). The thinkers in question were agreed also in this, that men do well to walk not only by "reasoning reason", but also by faith. "Without faith men cannot embody the life of reason" (232).

The author makes no claim to originality in his presentation of the six philosophers. But he has drawn throughout on the best authorities, and what is more has made the writings of each a part of his own thought. The result is a vivid and accurate presentation, from the angle, be it understood, of the problem selected for consideration. The best studies, in our opinion, are those of Hobbes and Pascal. It is a relief to find the author giving Hobbes full credit for sincerity and seriousness in his utterances on Christianity. "No great thinker was ever more convinced that the Christian minister's high calling consists in one thing—in proclaiming Jesus as the Christ" (65). "Hobbes recognised far more clearly than most men that our obligation to obey God is absolute" (92). "Hobbes never tried the present-day escape from the social difficulty by regarding religion itself as the opiate of the people and the very thought of God as a social misfortune. He is aware that such positions were advocated in antiquity and in his own time. It is as a genuine believer in God that the great materialist rejects all such atheistic positions" (81). The lecture on Pascal, again, contains some admirable comments on the famous "*le cœur a ses raisons*". "Pascal could have supported his views by quotation from other great philosophers. He might have traced kinship between Platonic reason and what he himself called the 'heart'" (124). "Wherever he attacked or belittled geometry, it was with full command of all the powers reason affords. He but defined the limits of reason to indicate its true greatness, which consists, at last, in submitting to reality. So nothing is more consistent with reason than disavowing it in matters which surpass it" (133). The weakest chapter is that on Locke. But Locke, for all his historical influence on English religious thought, is relatively unilluminating and pedestrian when he treats of the problem of faith and reason.

As a popular exposition, within the bounds of the aforementioned problem, this book furnishes an admirable stimulus, and should prove helpful to many students of theology: In a review primarily designed, as MIND is not, for theological readers, it would merit a longer notice.

W. G. DE BURGH.

Received also :—

- Descartes, *Discours de la Méthode*, avec introduction et remarques de G. Gadoffre, Manchester University Press, 1941, pp. xliii + 94, 3s. 6d.
- A. C. Ewing, *Reason and Intuition* (British Academy Annual Philosophical Lecture, 1941), London, H. Milford, pp. 43, 2s. 6d.
- H. H. Farmer, *The Servant of the Word*, London, Nisbet & Co., 1941, pp. vi + 152, 6s.
- H. Keyserling, *Immortality*, London, H. Milford, 1941, pp. xvi + 232, 5s.
- R. Kroner, *The Religious Function of Imagination*, New Haven, Yale University Press; London, H. Milford, 1941, pp. 70, 6s.
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- H. N. Raghavendrachar, *The Dvaita Philosophy and its Place in the Vedānta*, Mysore, University of Mysore, 1941, pp. 282, Rs. 3.
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## VII.—NOTES.

On A. A. LUCE, *MIND*, July, 1941, 50, 258-267,  
Berkeley's *Existence in the Mind*.

Any "sensible quality", such as the red of a ripe cherry, or any "sensible object", such as the cherry itself, is, according to Berkeley, an "idea" in the mind of God. "Idea" is Berkeley's characteristic term, though he uses equivalent words or phrases.

Philonous, in *The Third Dialogue*, explains that "idea" is understood to imply "a necessary relation to the mind"; custom also inclines philosophers, he adds, to ascribe existence "in the mind" to "the immediate objects of the understanding". The things or qualities of common sense are ideas in the mind of God because the perfect Spirit produces and perceives them. Berkeley usually insists on "being perceived" as essential to "the existence of an idea". Luce approves Berkeley's abbreviation of "in direct cognitive relation to the mind" into the simpler "in the mind", but "direct cognitive relation" does not fully express Berkeley's meaning. A spirit, or mind, as understanding, perceives ideas; as will, it produces, or operates on, them. Mind or spirit is constituted by will and understanding: this remark by Philonous in *The Third Dialogue* points to the causal side of God's perceiving, for the Deity, as he perceives, both creates and cognises. The "sensible world", that great congeries of ideas in the mind of the Supreme Spirit, is *created* by God. In this sense the cherry exists only because God perceives it. Since all objects are eternally known by God, or have an eternal existence in his mind, as Philonous says, God perceives objects into existence and continually maintains their existence by perceiving them. Freely phrased, God thinks the material world into existence and maintains it by thinking it. Every colour or coloured thing is thus an idea in his mind. What common sense calls a material thing Berkeley calls an idea. Each such idea only exists because God creatively perceives it.

Since a cherry is perceived into existence by God for human minds to perceive on occasion, it cannot be an idea in those minds in the same way as it is in the mind of God. It can be an *object* both for God and man, but it cannot be the man's own creation. Berkeley recognises this: bodies (ideas) may exist outside any particular mind, and they can be outside one mind by existing in another (Principles, 48, 90); also, no ideas or combinations of ideas can exist exterior to *all* minds (First Dialogue). Since the sensible object (idea) can exist outside all human minds, for no one need be looking at the cherry, it must finally exist, by being creatively perceived, in the mind of God.

Yet Berkeley exhorts the reader to consult his own thoughts to be convinced that an idea cannot exist outside the mind, or unperceived (Principles, 22). Philonous (in *The Second Dialogue*), argues from his own perceptions that an idea can exist only in a mind, and thence that the things, or ideas, he perceives are known by the understanding and produced by the will of an Infinite Spirit.

Berkeley can *imagine* the idea of a hand or of a man or of any other particular thing (Principles, Introd. 10). The image, especially the visual image, predominates in Berkeley's conception of imagination. These images, these ideas *formed* by the imagination, or excited in it (Principles, 3, 23, 33) are, as Philonous affirms in *The Second Dialogue*, "truly in the mind". They are, as Philonous also says, "things imagined", for there are things "either sensible or imaginable". They are *objects* of the imagination just as sensible things are objects of sense—Philonous implies this in *The Third Dialogue*. Thus the idea of imagination, such as the visual image of a cherry, is the ephemeral analogue, momentarily *in* a human mind, of the eternal idea of sense, such as the cherry itself, *in* the mind of God. Such an idea of imagination exists only so long as it is imagined or perceived, and, just as God creatively perceives sensible ideas so the human mind productively perceives imaginable ideas. The ideas formed by the imagination apparently prompted Berkeley's notion of *in* the mind. These ideas are *in* the mind because they are produced by the mind as objects for itself and experienced by it. Though sensible ideas invade the human mind and are therefore outside it they also exist only by being perceived, for God creates them as objects for his perception. These sensible ideas, the material things or qualities of common sense, exist eternally in God's mind because his creative perception of them never stops; the ideas of imagination exist ephemerally in human minds because they are only productively imagined during fleeting moments.

Berkeley does regard the "human mind" as "creative, constitutive or generative" though Luce denies this (p. 265). The human mind, as an always active spirit, manifests itself always both in perceptive understanding and productive will. "Imagining" is one of the mind's "divers operations" (Principles, 2); Philonous, in *The Second Dialogue*, perceives "numberless ideas" which he wills in "great variety" and raises in his imagination. He daily experiences, he says also, the production of ideas by a spirit and their existence in it.

When Kant excused Berkeley for degrading bodies to mere illusion he misunderstood Berkeley's sensible object as much as Dr. Johnson did. Luce (p. 258) refers to Kant's other version of Berkeley—things in space are merely imaginary entities. Luce rightly regards this as an attribution of "nonsense to a sensible thinker", but Kant's error hints at a truth. Man imagines a fleeting, intangible and fictitious cherry; God, so to speak, imagines a cherry that can be eaten. An idea of imagination in a human mind is a "fiction" of that perceiving mind; an idea of sense in the mind of God is a real being such as common sense considers trees or clouds to be. Speaking freely, without ontological nicety, the world of material objects is a world of ideas in God's mind because he thinks, or creatively perceives, them into existence and maintains them by continued thinking or creative perception. Thus sensible things exist because God perceives them. Ideas of imagination exist when, and only when, they are productively perceived in human minds. To speak freely again, man can only imagine creatures of fancy, but God imagines the real world of real things (Principles, 33, 36; *Third Dialogue*, etc.).

Dr. Johnson thought that he could not kick a *mental* stone. Berkeley thought so too, but he did not think that the stone was mental, though Dr. Johnson thought he did think so. Luce argues against the mental nature of Berkeley's "ideas", and notes how the ineffectiveness of the passive ideas precludes them from being mental. If they were mental

they would be spiritual; if they were spiritual they would be actively effective. Unthinking objects, the ideas, cannot be thinking mind without confounding two natures so unlike as idea and spirit. Thinking, willing and perceiving spirits are "wholly different" from ideas. Berkeley can drop into inconsistencies, real or only apparent, but he cannot lodge so glaring an inconsistency as a *mental* idea in his system: an idea is entirely distinct from the spirit or mind in which it exists or by which it is perceived (Principles, 2, 138 f., 142; Third Dialogue).

Luce calls "in the mind" a "key phrase". It is if "to exist is to be perceived", which is a key phrase in Berkeley, is the equivalent of "to exist is to be in the mind". Berkeley does say that distinct existence in a mind is the same thing for an idea as being perceived by a mind (Principles, 2 f.) and he often drops this equivalence into his text. When a man perceives a cherry he is in cognitive relation to it: Berkeley often calls the cherry, as an idea, an immediate object of his understanding. This purely cognitive relation does not confer existence on the cherry, which exists when the man does not perceive it, and, according to Berkeley, the cherry is external to the mind in the sense of not being generated from within it (Principles, 90). Philonous, in *The Second Dialogue*, argues that since sensible things exist apart from his perception of them they must exist in God's mind. The cherry does not exist by being perceived, nor is it genuinely in the mind, when the perceiving mind is human. It exists because it is in God's mind and perceived by it. It is, as Philonous says, known by God's understanding and produced by his will. God's ideas, Philonous says again, in *The Third Dialogue*, do not come to him by sense. It seems to be a reasonable interpretation of Berkeley that *esse* is only properly *percipi* when the perceiving includes, or is combined with, a dependence of the idea, as object, on the productive will. Then, and only then, is the idea genuinely *in* the mind. This is true both of sensible ideas in the mind of God and of imaginable ideas in the minds of men.

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